NEW GENESEE FARMER,

AND GARDENER'S JOURNAL.

VOL. IV. ROCHESTER, MONROE CO., N. Y.—MARCH, 1843. NO. 3.

PUBLISHED MONTHLY.

C. F. CROSMAN AND E. SHEPARD, PROPRIETORS.

HENRY COLMAN, EDITOR.

TERMS—WHOLE VOLUME.		TERMS—HALF VOLUME.	
1 copy 12 months,	1 dollar.	1 copy 6 months,	50 cents.
4 " "	3 "	5 " "	2 dollars.
7 " "	5 "	14 " "	5 "
15 " "	10 "	30 " "	10 "

On 50 copies or more, a discount of forty per cent will be made.

☞ Payments to be made in advance and free of postage.

Bills of all specie paying banks will be taken at par, *if sent free of postage.* Back numbers and volumes can be furnished.

The postage on this paper is only *one cent* to any place within the State, and *one and a half cent* to any part of the United States.

Postmasters are permitted by law to remit money free of postage. The friends of agriculture are respectfully requested to assist in obtaining subscribers. Address CROSMAN & SHEPARD, Rochester, N.Y.

Three Thousand More Subscribers Wanted!

WHO WILL AID IN OBTAINING THEM?

☞ An intelligent and respected friend from Western New-York, called his neighbors together last week, for the purpose of forming a Town Agricultural Club. He laid before them the claims of the New Genesee Farmer, and procured at once twelve subscribers, with the promise of more. This is a substantial kindness, and, he may be assured, justly appreciated. We wish other friends would do the same. It is only for our subscribers to take a little interest in speaking to their neighbors, to enlarge our list to its proper extent.

It will be seen by the terms above that any individual who procures three subscribers, gets his own paper free; or any four neighbors who pay seventy-five cents each to their Post Master, can have their names and money sent on together, free of expense, and the whole volume will be forwarded.

To Correspondents and Others.

Silk Communication.—We are greatly indebted to our friend, Mr. Allen, for his communication upon silk. It sometimes requires a good deal of courage to say that we have failed in our undertakings; but it is often of much more use to learn the causes of failure, than the examples of success.

Report of the Commissioner of Patents.—We are indebted to Mr. Ellsworth for this most interesting report. It reached us too late for us to give it a suitable notice in this number of the Farmer; but we have no hesitation in pronouncing it the most valuable agricultural document ever given to the American public, and may properly be designated a second Declaration of National Independence.

We have a large number of communications and valuable matter for the Farmer, on hand, which we must, for the present, acknowledge in this general way.

European Agricultural Tour.—Mr. Colman has the highest satisfaction in acknowledging, on the part of the public press, a strong approval of his enterprise. This cheering salutation from his personal friends and the friends of agriculture in all parts of the country, has awakened in him all the grateful ambition of youth, and will prompt him "to leave no stone unturned" to make his reports worthy of their acceptance. His subscription, likewise, is most liberal; and though not yet entirely adequate to secure the expenses of the enterprise, yet enough to warrant his departure. During March he may be addressed at Boston, Mass.

The following societies and public bodies have given their subscriptions, most of them with a view of distributing the books as premiums:

New-York State Agricultural Society, New-York, for 100 copies; Massachusetts Agricultural Society, Mass., for 100 copies; Worcester Agricultural Society, Worcester county, Mass., 40 copies; Philadelphia Agricultural Society, Penn., 40 copies; American Institute, New-York, 40; Essex Agricultural Society, Essex county, Mass., 25 copies: Massachusetts Horticultural Society, Boston, Mass., 25 copies; Monroe Agricultural Society, Monroe county, N. Y., 25 copies; Livingston County Agricultural Society, 10 copies; Library of Congress, 10 copies.

Several other societies have engaged their subscriptions, but have not yet determined on the number which they will take.

Mr. COLMAN gratefully acknowledges the most generous support on the part of personal friends and public-spirited individuals in different parts of the country, and the promise of many more subscriptions; two gentlemen having subscribed for 100 copies each; one for 50 copies; twelve for 25 copies each; eight for 10 copies each; forty for 5 copies each; and a large number for two or three copies each; besides single subscriptions.

The names of the subscribers will be affixed to the work; and this emphatical and spontaneous approbation of the enterprise on the part of gentlemen of the highest character in the country, is more gratifying than even the liberality of their subscriptions.

Agricultural Gleanings.

AMOUNT OF SEED.—C. B. M., of Canandaigua, used to sow three bushels of oats to the acre. He has now, for a few years, practiced sowing five bushels, and considers it greatly to his advantage.

This corresponds with the practice of an excellent farmer in Massachusetts, on Connecticut river, who used to follow the custom of his neighbors, and sow only three pecks of rye to the acre; but now sows three bushels, and is very much more than compensated by this increase of seed, by an increased yield.

The general rule is to sow a good deal of seed where the land is light and poor; and little, where it is rich and highly manured. An intelligent farmer of our acquaintance, chooses to reverse the rule; and sows little seed where the land is light, and seeds heavily where the land is rich. We can only say that his success speaks well for his practice. There is good reason to think that our farmers in general, are much too parsimonious of their seed, both of grain and grass.

YIELD OF WHEAT.—The crops of Mr. Clough, at Alton, Sodus Point, averaged, the last season, thirty-eight bushels of wheat per acre. He is not satisfied with less; and he is determined to get more—a very wise resolution.

The crops of wheat of Dr. T., of Lockport, in 1839, averaged fifty bushels per acre. The crop preceding this was barley, which produced thirty-five bushels per acre. The crop preceding the barley, was Indian corn, producing forty to fifty bushels per acre; and this was manured with thirty loads of long barn manure to the acre.

J. J., of Lafayette, Seneca county, in 1833, produced a crop of wheat on 65 acres of land, averaging 42½ bushels per acre; or, in all, 2746¼ bushels.

The family of Do-littles and I-cants will read this, and call it book farming. It will be more than nine days before the eyes of such people will be open. They will sleep on, without doubt, at least until Miller's prophecies are fulfilled. It is book farming with a witness; for certainly, at the close of the year it appears extremely well on the farmer's book of accounts.

WEIGHT OF WHEAT.—I. W. B., of Waterloo, N. Y., one of the very best farmers in Western New-York, says of the Hutchinson wheat, that four bushels and ten pounds will make a barrel of flour. The bushel in this case is rated at the legal weight of 60 pounds. A measured bushel (cubic measure) or strike of the Hutchinson wheat, weighs sixty-four pounds.

EFFECTS OF JUDICIOUS AND CAREFUL CULTIVATION.—On the farm of I. W. B., Waterloo, Seneca county, six years since, in a field producing 347 bushels of wheat, out of this amount there were 97 bushels of waste, or of impure and foul stuff. In selling his wheat, he was then obliged to abate 4 pounds to a bushel, on account of its impurity. Since that time he has had no foul stuff among his wheat, neither cockle, tares, chess, nor Canada thistles. His fields, at the time he entered upon this farm, were very much filled with weeds and pernicious plants; but he gave early warning to these profitless tenants to quit his premises; and by five plowings and taking care to plant only such seed as was pure, he has effectually cleansed his fields. His whole farm is an example of excellent management.

PROFIT OF THE BEE ECONOMY. I. W. B., (we mean no pun in this case; but we shall not presume to call him I. W. C., for the sake of avoiding the imputation.) gave us the history of a hive of bees, beginning with May 1, 1841. The hive was emptied by the boxes, during the season, three times; and the amount of honey taken up, was 72 pounds. The weight of the hive and bees remaining after the last gathering, was 45 pounds.

What effects are produced by associated and persevering labor, and that labor itself a pleasure! Who can doubt that to these little industrious creatures, the season of labor is a season of unmixed delight! And so it may be to every living being; and so God intended it should be. And all that is necessary to render it so, is, that the labor should be natural—pursued under wholesome restraints—and, above all, useful. We were about philosophizing in this case, on the amazing results of persevering and associated labor; and in remarking the wonderful amounts and accumulations from even the most humble and minute exertions. The silkworm clothes we had almost said half mankind; and its contributions to the wealth of the world, are probably far greater than the products of all the gold and silver mines now open. When we look at the bee, "the little busy bee," gathering honey all the day from every opening flower, extracting it from the very bosom of the flowers, in minute atoms, and with a touch so fine that it does no injury to the tenderest plant; and then look at its accumulated stores, from which man is permitted to draw so bountifully, without trespassing upon the treasures necessary for the support of this colony of industry, what sentiments of admiration are awakened in the sensitive bosom! Ah! indeed, to us they are mingled, as we doubt not to thousands and thousands of others, with precious, most precious recollections of paternal love and fidelity, first opening our eyes to this beautiful example of God's wonder-working providence, in teaching us to remark of this humble insect:

"How skilfully she builds her cell!
How neat she spreads her wax!
And labors hard to store it well,
With the sweet food she makes!"

and gather from it an impressive and lasting lesson of the value of order and industry.

To the Agricultural Public.

The Publishers of the New Genesee Farmer respectfully call upon the friends of the paper and the friends of agriculture in the State and country, to aid them in their enterprise. They have done their best to make the paper worthy of public acceptance; and of the friends of an improved and improving husbandry, they feel that they may confidently ask support.

The increase of the price of the paper is alleged by some as a cause for withholding their subscriptions. But one dollar a year, for a paper of this size and description, is really very little. A man who pays it, can hardly discover, at the end of the year, but by some extremely exact calculation, that it is gone; and there are innumerable ways by which he may save this sum without prejudice to his comfort or independence. But, with a view to accommodate persons even of the smallest means, we send the paper to any four subscribers who unite their subscriptions, for three dollars, which is only seventy-five cents per year, and not one and a half cents per week.

To the friends of agriculture—the farmers—we say, Take our paper, as the channel of agricultural intelligence from all parts of the world. Is there no pleasure in knowing what other people are doing in these times of more than rail-road progress in all the arts and sciences? Take our paper, in the next place, as a source of intellectual gratification. We do not assume to bring our own humble essays into view. It is our province merely to spread the cloth and to arrange the dishes, and to wait your farther demands. At the same time we furnish you from month to month, from the contri-

butions of liberal and enlightened minds, dishes the most substantial, delicious, and varied; gratifying to the Epicurean taste; useful to life, and conducive to health and comfort; and will you not regard such an intellectual feast worth purchasing? We call upon the liberal and enlightened to take our paper on other grounds. Take it on *public* grounds. The advancement of agricultural knowledge and improvement is a great object now engrossing the attention of the civilized world, and every where regarded as intimately connected with, and instrumental to, good morals and the general welfare. Our paper has this for its sole end and aim. By extending useful information, by imparting good counsels, by relating the exact history of other men's experience, and applying ourselves by every good motive to rouse and cherish an honorable emulation in useful experiments and improvements, we are doing what we can for these purposes. Now if it is but little that we can do, remember that it is very little encouragement that we ask.

We respectfully call upon our friends, therefore, in all parts of the country, to help us, first by subscribing themselves. Many persons we know, are not aware of, or do not remember, the terms of our subscription; and though they would gladly continue their subscription, yet suffer it to die out through mere neglect. Our old subscription at the close of the year is necessarily given up. It is expected, on the part of persons who wish to continue the paper, that they will send in their names; and this is always easily done through their postmaster. This rule is indispensable, where the subscription, from the smallness of its amount, will allow of no extraordinary expense in its collection, and is expected to be paid in advance.

Secondly, we respectfully ask every subscriber to our paper to procure one or more other subscribers among his neighbors. This is almost always easily done; and many persons, if they would undertake this service, could easily send us their fives, tens, and even twenties of names. We should very gratefully appreciate such kindness.

Thirdly, we respectfully ask our friends, the postmasters, to interest themselves in our circulation. They may thus render the public a most effectual service, without any great cost to themselves. We are already much indebted to their uniform and almost universal civility; and this emboldens us "to ask for more."

Fourthly, we desire to acknowledge our obligations to the Public Press, which has so often seconded our interests. Will they aid us by such friendly notices as may be convenient? Our paper being exclusively agricultural, and greatly restricted in its advertising department, we cannot always reciprocate such favors as we should be glad to do, in kind; but our friends may be assured that the kindness is not the less sincerely felt.

Mr. COLMAN joins with us in expressing his strong hope that his personal friends will continue their encouragement to this paper. Though holding no longer a pecuniary interest in its success, he feels a strong solicitude for its circulation and encouragement; and shall continue, at least for the current year, to greet his friends through its columns. The Editorial department will pass into able hands. Mr. Bateham and Mr. Thomas are well known to this community for their agricultural inquiry and intelligence; and, besides the aid of other contributors, they are promised the constant aid of the Rev. Dr. Penney, now at Rochester as the Editor of the Evening Post, whose early agricultural experience, acknowledged talent, extensive scientific acquirements, and sound judgment, will essentially contribute to the value of the paper.

The publishers trust this earnest appeal to the agricultural community, will not be in vain. The paper has strong claims upon the Farmers of Western New-York, who will not permit their own legitimate offspring to suffer at their own doors. It has equal claims upon the whole country; for it is in no respect sectional in its feelings or character. Some of our friends seem to labor under a misapprehension in this matter. But we assure them that we shall do our best to adapt the paper to every meridian of the United States, and to make it the vehicle of authentic intelligence foreign and domestic, and alike useful to every part of the country.

THE PUBLISHERS.

FITNESS OF THINGS.—Jeremy Taylor says that the world is a board with peg-holes, some square and some round, and that certain men, fitted for one state of things and not for another, are square pegs which get into round holes.—Nothing can adjust them to their stations, or fix them with any firmness or uprightness. Change their positions, and set each right; but the change is impossible.

LETTERS FROM OHIO---No. 3.

SUCCESSFUL CULTIVATION OF MADDER.

MR. EDITOR:—In these times of national embarrassment, when the whole country is suffering under the ill-effects of an immense indebtedness to foreign countries, it certainly is the duty of every good citizen to inquire what he can do to aid in restoring prosperity, or in removing the causes of adversity; and the man who successfully introduces or promotes the home production or manufacture of any article of consumption hitherto imported, is a true patriot, and deserves the thanks of his country.

It will doubtless be a matter of surprise to many, to learn that for the single article of Madder, we are annually paying an immense amount to foreign countries, while at the same time it is fully demonstrated that this article can be raised in the greatest perfection, and with good profit, in a large portion of the United States.

In the central or eastern part of the State of New York, madder has been cultivated for some years past, but I believe not very extensively, or with much profit, probably owing to a want of sufficient heat in summer to give luxuriance and depth of color to the roots; but in the State of Ohio, and similar latitudes, this difficulty cannot exist, and the climate is doubtless as favorable as that of Germany, if not more so.

While traveling in the Western part of Ohio the past month, I was informed that Mr. Joseph Swift, a farmer of Erie county, was largely engaged in the culture of madder, and found it very profitable. I accordingly determined to visit him and learn the facts in the case. Mr. Swift was one of the earliest settlers of that part of the country, having resided there nearly thirty years, on the farm he now occupies, which consists of about 400 acres of choice land, mostly alluvial "bottoms," in the valley of the Vermillion river, seven miles from Lake Erie. Having informed himself on the subject, he commenced by planting nine acres of madder in the spring of 1839, which he allowed four seasons' growth, and harvested the crop the past fall. The result is, he is now building a large and beautiful house with the proceeds. I found Mr. Swift very hospitable and intelligent, and willing to communicate any information I desired. At my request he furnished me the following

PRACTICAL DIRECTIONS FOR THE CULTIVATION OF MADDER,

which he remarked must be understood as intended for those who wish to cultivate only a few acres, and cannot afford much outlay of capital. Those who wish to engage in the business on an extensive scale, would need to adopt a somewhat different practice.

SOIL AND PREPARATION.

The soil should be a deep, rich, sandy loam, free from weeds, roots, stones, &c., and containing a good portion of vegetable earth. Alluvial "bottom" land is the most suitable, but it must not be wet (nor too dry.) If old upland is used, it should receive a heavy coating of vegetable earth, (from the decayed wood and leaves.) The land should be plowed very deeply, in the fall, and early in spring apply about one hundred loads of well-rotted manure per acre, spread evenly, and plowed in deeply; then harrow till quite fine and free from lumps. Next plow the land into beds four feet wide, leaving alleys between, three feet wide, then harrow the beds with a fine light harrow, or rake them by hand so as to leave them smooth and even with the alleys; they are then ready for planting.

PREPARING SETS AND PLANTING.

Madder sets, or seed roots, are best selected when the crop is dug in the fall. The horizontal uppermost roots, (with eyes) are the kind to be used: these should be separated from the bottom roots, and buried in sand, in a cellar or pit. If not done in the fall, the sets may be dug early in the spring, before they begin to sprout. They should be cut or broken into pieces, containing from two to five eyes each; i. e. 3 to 4 inches long. The time for planting is as early in spring as the ground can be got in good order, and severe frosts are over, which, in this climate, is usually about the middle of April. With the beds prepared as directed, stretch a line lengthwise the bed, and with the corner of a hoe make a drill two inches deep along each edge and down the middle, so as to give three rows to each bed, about two feet apart. Into these drills drop the sets, ten inches apart, covering them two inches deep. Eight or ten bushels of sets are requisite for an acre.

AFTER CULTURE.

As soon as the madder plants can be seen, the ground should be carefully hoed so as to destroy the weeds and not injure the plants; and the hoeing and weeding must be repeated as often as weeds make their appearance. If any of the sets have failed to grow, the vacancies should be filled by taking up parts of the strongest roots and transplanting them. This is best done in June. As soon as the madder plants are ten or twelve inches high, the tops are to be beat down on to the surface of the ground, and all, excepting the tip end, covered with earth shoveled from the middle of the alleys. Bend the shoots outward and inward, in every direction, so as in time to fill all the vacant space on the beds, and about one foot on each side. After the first time covering, repeat the weeding when necessary, and run a single horse plough through the alleys several times to keep the earth clean and mellow. As soon as the plants again become ten or twelve inches high, bend down and cover them as before, repeating the operation as often as necessary, which is commonly three times the first season. The last time may be as late as September, or later if no frosts occur. By covering the tops in this manner, they change to roots, and the design is to fill the ground as full of roots as possible. When the vacant spaces are all full, there will be but little chance for weeds to grow; but all that appear must be pulled out.

THE SECOND YEAR,

Keep the beds free from weeds; plow the alleys and cover the tops, as before directed, two or three times during the season. The alleys will now form deep and narrow ditches, and if it becomes difficult to obtain good earth for covering the tops, that operation may be omitted after the second time this season. Care should be taken when covering the tops to keep the edges of the beds as high as the middle, otherwise the water from heavy showers will run off, and the crop suffer from drought.

THE THIRD YEAR,

Very little labor or attention is required. The plants will now cover the whole ground. If any weeds are seen they must be all pulled out, otherwise their roots will cause trouble when harvesting the madder. The crop is sometimes dug the third year; and if the soil and cultivation have been good, and the seasons warm and favorable, the madder will be of good quality; but generally, it is much better in quality and more in quantity, when left until the fourth year.

DIGGING AND HARVESTING.

This should be done between the 20th of August and the 20th of September. Take a sharp shovel or shovels, and cut off and remove the tops within half an inch of the surface of the earth; then take a plow of the largest size, with a sharp coulter and a double team, and plow a furrow outward, beam deep, around the edge of the bed; stir the earth with forks, and carefully pick out all the roots, removing the earth from the bottom of the furrow; then plow another furrow beam deep, as before, and pick over and remove the earth in the same manner; thus proceeding till the whole is completed.

WASHING AND DRYING.

As soon as possible after digging, take the roots to some running stream to be washed. If there is no running stream convenient, it can be done at a pump. Take large, round sieves, 2½ or 3 feet in diameter, (found in eastern cities,) with the wire about as fine as wheat sieves; or if these cannot be had, get from a hardware-store sufficient screen-wire of the right fineness, and make frames or boxes about 2½ feet long and the width of the wire, on the bottom of which nail the wire. In these sieves or boxes, put about half a bushel of roots at a time and stir them about in the water, pulling the bunches apart so as to wash them clean; then, having a platform at hand, lay them on it to dry. To make the platform, take two or three common boards so as to be about four feet in width, and nail cleets across the underside. On these spread the roots about two inches thick for drying in the sun. Carry the platforms to a convenient place, not far from the house, and place them side by side, in rows east and west and with their ends north and south, leaving room to walk between the rows. Elevate the south ends of the platforms about eighteen inches, and the north ends about six inches from the ground, putting poles or sticks to support them, and it will greatly facilitate drying. After the second or third day drying, the madder must be protected from the dews at night and from rain, by placing

the platforms one upon another to a convenient height, and covering the uppermost one with boards. Spread them out again in the morning or as soon as danger is over. Five or six days of ordinarily fine weather will dry the madder sufficiently, when it may be put away till it is convenient to kiln dry and grind it.

KILN DRYING.

The size and mode of constructing the kiln may be varied to suit circumstances. The following is a very cheap plan, and sufficient to dry one ton of roots at a time. Place four strong posts in the ground twelve feet apart one way, and eighteen the other; the front two fourteen feet high and the others eighteen; put girts across the bottom, middle and top; and nail boards perpendicularly on the outside as for a common barn. The boards must be well seasoned, and all cracks or holes should be plastered or otherwise stopped up. Make a shed roof of common boards. In the inside put upright standards about five feet apart, with cross pieces to support the scaffolding. The first cross pieces to be four feet from the floor; the next two feet higher, and so on to the top. On these cross pieces lay small poles about six feet long and two inches thick, four or five inches apart. On these scaffolds the madder is to be spread nine inches thick. A floor is laid at the bottom to keep all dry and clean. When the kiln is filled, take six or eight small kettles or hand furnaces, and place them four or five feet apart on the floor, (first securing it from fire with bricks or stones,) and make fires in them with charcoal, being careful not to make any of the fires so large as to scorch the madder over them. A person must be in constant attendance to watch and replenish the fires. The heat will ascend through the whole, and in ten or twelve hours it will all be sufficiently dried.

BREAKING AND GRINDING.

Immediately after being dried, the madder must be taken to the barn, and thrashed with flails, or broken by machinery, (a corn cracker or something of the kind) so that it will feed in a common grist-mill. If it is not broken and ground immediately, it will gather dampness so as to prevent its being ground. Any common grist-mill can grind madder properly. When ground finely it is fit for use, and may be packed in barrels like flour for market.

AMOUNT AND VALUE OF PRODUCT, &c.

Mr. Swift measured off a part of his ground and carefully weighed the product when dried, which he found to be over two thousand pounds per acre, notwithstanding the seasons were mostly very dry and unfavorable. With his present knowledge of the business, he is confident that he can obtain at least 300 pounds per acre, which is said to be more than is often obtained in Germany. The whole amount of labor he estimates at from 80 to 100 days work per acre. The value of the crop, at the usual wholesale price, (about 15 cents per pound) is from 300 to 400 dollars. In foreign countries it is customary to make several qualities of the madder, which is done by sorting the roots; but as only one quality is required for the western market, Mr. Swift makes but one, and that is found superior to most of the imported, and finds a ready sale.

If any person desires instruction for making several qualities of madder, or further information respecting any other point, it may be obtained by addressing, (post paid) Joseph Swift, Birmingham, Erie county, Ohio.

Respectfully, &c. M. B. BATEHAM.

Medina, February 6, 1843.

For the New Genesee Farmer.

Mr. EDITOR:—If you think the following observations worthy of a place in the Farmer, you may perhaps subserve the common interests of our country by giving it a place.

Culture of Weld---Reseda Luteola.

Weld is a plant of great use to the dyers, being of a fast yellow. It is cultivated and extensively used in Europe, though but little known in this country. There is no drug for dying yellow that equals it for brilliancy and permanency of color when properly dyed. Weld is said to be the only drug used by the London dyers and calico printers for their finest and fastest yellows. This plant has been long in use in Europe, and is supposed to be the lutum of Virgil. Weld grows well on warm, gravely, or sandy loam; its culture is simple, requiring to be sown in drills, and the ground kept free from weeds and suitably hoed. It is generally both annual and biennial. I have cultivated it in small quantities for several years, and have always found that a part of what I sowed would come to maturity the first season, while the remainder did not until the second season after the seed was sown. It should be pulled when in full bloom, but not before it is nearly done flowering. The flowers are produced in spikes that continue for a considerable length of time to elongate and bear new blossoms, while those at the base of the spike will sometimes contain seeds. Weld is useful as a dye, not only for yellow, but for all compound colors where yellow is a constituent part; that is, in dyeing woolen cloth. In dying yellow with weld, the common mordant is the same as from madder; but at the close of the process, the addition of an alkali is found greatly to improve the color; and for this purpose I have found the volatile alkali of stale urine particularly efficacious.

Yours. &c., J. ELLINGWOOD.

Gainesville, Wyoming County, N. Y.

MADDER---Rubia Peregrina.

The common, or Dutch Madder, is already cultivated to some extent in this State, and may be considered a very valuable acquisition to our country; but the kind I would here wish to notice, is not at present known to the cultivators in our country. It is only the kind used for dyeing that color which is known by the name of Turkey Red, on cotton; a color unrivalled for its richness and durability. This kind of madder is commonly known by the name of Smyrna, or Levant Madder, and is now cultivated both in England and in France. Would it not be worth while for some one who is in the habit of importing seeds and roots from Europe, to import from there some of the roots of this kind of madder, which would be of great value to the manufacturing interests of our country?

Yours. &c., J. ELLINGWOOD.

Gainesville, Wyoming County, N. Y.

Canker on Plum Trees.

PARSONSFIELD, ME., January 14, 1843.

MESSRS. CROSMAN & SHEPARD:

Sirs—I noticed an inquiry in the last New Genesee Farmer by your correspondent W. D. Cook, in relation to the black canker making its appearance on plum trees in Wayne and other counties in New York. I suppose it is the same that has been so destructive to plum trees in Maine for the last twenty years. In 1820, I purchased the house and lot where I now live, and found two plum trees in the garden, one of which was so injured with the black canker, if that be the proper name for it, or black bunches on all parts of it, that I cut it down. The other was much injured, but had some healthy branches. This was the first time my attention was drawn to them. I knew nothing of the cause or remedy, and could get no information from others. On examination I found invariably in every bunch one or more white worm or maggot. I removed all the bunches with a knife, taking off the limb where it was small and could be spared, and removing the bunches on the larger ones and trunk. In many places where I did not cut deep enough, the bunches would commence growing out anew, of a green color, at the edge of the incision. These I removed before they turned black. By pursuing this course the tree revived, and I had sixteen or seventeen good crops of plums from it; but some of the incisions on the large branches and trunk ultimately caused its decay and death. I have since pursued the same course with my plum trees of various kinds, with perfect success, while my neighbors who have neglected to do so, have lost theirs. Those who have followed my practice, have succeeded in all cases, in exact proportion to the care, thoroughness, and perseverance in the process. In one garden, within fifty rods of mine, the owner had a fine lot of some dozen or twenty plum trees, in a good, healthy condition, beginning to bear, when he disposed of it; and the owner not residing on the lot, and no one occupying it who had an interest in preserving the trees, neglected to remove the first bunches, and in a few years they were covered, and are now nearly all dead.

I believe the canker or bunches to be caused by the worm produced from eggs probably deposited in the tender bark by the insect, in the perfect state of fly or bug. Others consider it a disease in nature of a canker, (or cancer if you please,) affording a shelter for the worm. It is true, some things about the operation of the disease when cut away apparently leaving no place for the remains of eggs of worms and starting out again like a cancer on the human system, when removed by the knife or cautery, appear as though it was a natural disease of the tree. At any rate, whether the cause be worm, or natural disease like a cancer, the remedy is a removal by knife. Occasionally I discover one on my trees, not more than one to a tree in a season, on an average, which I immediately remove and burn. I account for their occasional visits to the fact that trees affected in the neighborhood breed and perfect the fly which sometimes finds its way to mine.

I have noticed in some agricultural paper speculations as to the liability of trees to the disease in some locations, as by walls or otherwise, more than others; but my observations tend to confute all such theories.

I have noticed for a few years past, on the Kennebec and other eastern parts of the State, that red cherry trees are similarly affected, and I believe it is extending in this direction, but have seen none in this western part of the State, (York county,) but I have had no opportunity of close examination, whether it be of the same character of those on the plum or not. Indeed, I have seen the same on the wild cherry in the woods, having first noticed it east of the Penobscot three or four years ago, and have since seen a few instances near the water courses further west, even to this county, from which I infer the disease, or the worm causing it, is traveling west. Its appearance is like that on the plum trees, and I doubt not will be found on examination to be the same. I have had some queries in my own mind whether the worm or fly for want of plum trees as a first choice, do not resort to the cherry, as a second, from necessity, as I noticed no plum trees where I saw the cherry trees diseased.

If you think these observations are worth a place in the Farmer, as tending to direct attention profitably to the subject, you are at liberty to insert them.

Yours respectfully,

RUFUS McINTIRE.

We publish the above communication, not because it contains anything new in relation to the black canker, but to direct if possible, more attention to the care of fruit trees. The plum is one of the most delicious fruits that we enjoy, and well worthy of more attention than it generally receives.

Many of our citizens who possess not more than a few rods of ground, have trees of the "Yellow Egg," "Belmarr's Washington," &c. &c., that produce, annually, bushels of fruit, each as large as a hen's egg, and of the most exquisite flavor. Every farmer and cottager, by bestowing a very trifling expense and a little pleasant labor, may enjoy in abundance these healthful luxuries.

We hope that such of our readers as may have heretofore neglected their trees, will benefit by the hints given in this and our previous number.

Improved Dynamometer or Plow Guage.

We fear that the subjoined account may not be understood by persons who have not a good constructiveness, or are not familiar with machinery; but by those who are, it will be readily understood. We regret that we have not a drawing by which to illustrate it. The application of a balance in this way, is extremely ingenious, and upon trial at the Plowing Match at Batavia, in Genesee County, in October, was highly approved.

BATAVIA, October 21, 1842.

MR. H. COLMAN:

Dear Sir—Agreeably to your request, I send you the following statement, which I hope may prove intelligible to you.

Take a common pair of beam scales and ascertain what weight on the weighing hook will balance one pound on the end of the beam of your balance which note. Then, hitch your weighing hook to the clevice of your plow and the other hook to your doubletree, with the team attached; then attach a small cord to each end of a pair of spiral balances; one end of the cord tie to your near plow handle, the other end to the end of the beam of the large balances where the pound weight was put to balance the weight on the weighing hook; then start your team and regulate the length of the cord so as to work even; then if the spiral balance index shows in plowing eight pounds as the fair average figure, then multiply eight pounds by the weight that one pound balanced on the weighing hook. Or if 1 pound balances 32 on the weighing hook and the patent spiral balance index shows 8 pounds as the average figure, then 8 × 32=256, or if the figure shows 16 lbs, then 16 lbs × 32 =512 lbs, the draft required.

Yours very respectfully,

N. K. CONE.

From Colman's Fourth Report of the Agriculture of Massachusetts.

SHEEP HUSBANDRY.

[CONCLUDED FROM PAGE THIRTY-ONE.]

I will subjoin some miscellaneous notes, which will serve to illustrate the general mode of keeping sheep.

D. B. has sixty wether sheep in preparation for the market. He allows them as much hay as they will eat, and three pecks of corn and two bushels of potatoes daily among the whole. He will, by degrees, increase their feed.

A. A. has seventy-five fatting sheep; and, having lately added to their feed, gives them five pecks of corn per day, and one bushel of potatoes, with as much hay as they will consume—feeding them five times a day. He mentions the case of an excellent flock of sheep which were fatted upon corn, with liberty to go to a stock of poor meadow at their pleasure. To use his own expression, "the corn did the work." The quality of the hay does not seem important.

O. N., one of the best feeders in the country, has fifty-five sheep in one yard. At daylight he gives them a feed of corn, dividing it so as to give the flock about one bushel and a peck in the course of the day. After that, a foddering of hay; at nine o'clock another foddering of hay; at twelve o'clock another feeding of corn, the same as in the morning; after which, another feeding of hay; at four o'clock, P. M., another feeding of hay, and the same measure of corn as before. He thinks it best to have them finish their eating by night, so as not to be disturbed after dark; and that they relish their corn best at night.

N. D. and G. D. have one hundred and eighty fatting sheep. Feed with corn and hay; began with one pint, and now average about one quart of corn per day. Their sheep are uncommonly fine. The live weight of one, 180 lbs.

I. N. has one hundred wethers; fifty of them of a superior character. To the one hundred, gives one bushel, heaped measure, of oil-meal, per day, with hay. His oil-meal costs him twenty dollars per ton, besides the expense of transportation twenty-five miles.

D. N. has sixty sheep. To the sixty gives half a bushel of oil-meal and half a bushel of corn per day.

G. S. has fifty-eight sheep. Corn and hay only are allowed. Allows one and a half bushel of corn per day to the fifty-eight sheep.

A. R. has three hundred sheep, in pens of twenty-five sheep in each. His aim is to induce the sheep, besides hay, to take one quart of corn each, given at three times per day.

T. R. has one hundred and twelve sheep. Feeds with corn and hay. Fifty of them have one bushel per day. The best and most forward have one quart each. The live weight of one, two hundred and ten pounds.

G. D., an experienced feeder, is of opinion that no advantage is gained by giving the sheep meal instead of unground corn.

E. T., long familiar with the fatting of sheep, prefers wethers to ewes; prefers merinos to other sheep; buys them at different ages, so that they come to the stall in succession; thinks five years old the best age for fattening; and chooses to feed them moderately until a short time before he intends to market them, as, in his experience, they will not pay the cost of high feeding during a long time. He often begins in March to feed sheep which he designs to send to market after shearing. He is accustomed to keep his store-wethers in the yard with his cattle upon the orts and husks that are thrown out to them. He is careful not to suffer his fatting-wethers ever to be disturbed. When he begins to feed with corn, he never permits his sheep to be hungry. He keeps his sheep upon rowen the first part of the season; thinks merino sheep are kept at less expense than native; and deems the fattening of sheep profitable. He mentions a case in which he bought sixty merino wethers in June, for 133 cents each; and sold fifty of them in the ensuing March, for 600 dollars. His wether sheep, which are not sent to market until after shearing, often give four pounds of wool at a clip.

1. WEIGHT OF SHEEP.—The weights of ten Dishley wether sheep, fatted by a farmer in this county and sold in Boston, were as follows. The four quarters only were weighed. Three of them weighed 100 pounds each; one, 80 pounds; one, 82 pounds; one, 90 pounds; one, 91 pounds; one, 95 pounds; one, 107 pounds; one, 110 pounds:—total 995 pounds. The average weight of rough tallow to each, was 13 pounds. These sheep were three years old, and were fed mainly upon hay and Indian corn. They consumed, during the latter part of their stall feeding, more than a pint and a half of Indian corn each, per day. Though a quart was, in some cases, eaten by them, yet it was found to be more than they required. Twenty dollars per head were offered for them by the drover, before they left the yard; but, owing to an extraordinary change in the market, the owner received only fifteen dollars for them after being driven to Brighton.

2. EARLY LAMBS.—The practice of raising early lambs for market, has prevailed with some farmers. One excellent farmer to whom I particularly refer, has had his native ewes of good size, crossed with a Dishley ram, and arranged to have them lamb in January and February. Having every provision for the comfortable accommodation of the ewes and lambs at that inclement season, he has succeeded in raising very fine lambs for the early market, which have brought him two and three dollars a piece. In such cases, his sheep pay him a large profit. There is no doubt that the practice might be extended to much advantage.

3. HOUSING SHEEP.—A good deal of discussion has been had among farmers, as to the propriety of housing sheep in winter, and the practice of farmers in this respect, is various. The question cannot be answered without regard to circumstances. Our own native sheep bear exposure without injury or suffering. Few of them have known any other than the most severe usage, and, under such treatment, have acquired a hardiness of constitution adapted to their condition. Full-blooded merino sheep, likewise, if they were susceptible to its rigors when first introduced, have become inured to the climate. It is not so, however, with the Sazony, which are a tender race, and need very tender treatment. All sheep which lamb early, require shelter and a warm cote. The wool, likewise, is rendered coarser by exposure to the weather; and the quantity and compactness of the wool seem to bear a relation to the weather. This is a beneficent provision of the Creator, that the constitutions both of animals and vegetables, should become, within certain limits, fitted to their condition.

The practice of farmers in regard to housing their sheep, as I have remarked, is various. I have known a case in which a large flock of fine-wooled sheep have been kept confined in a close stable or barn the whole winter, without ever being let out even for the purpose of watering. An abundance of litter was furnished in this instance, and the sheep were kept as dry as the nature of the case admitted of. But the deaths in this farmer's flock were always numerous, and the health of the sheep suffered, without question, from a corrupted atmosphere. In other cases I have known farmers—and this appeared to me, when in that part of the country, to be the general practice with many extensive sheep-owners in Vermont and the North-Eastern part of New-York—not to allow their sheep any shelter in winter, but that which they find behind the walls or under a hay-stack. They have insisted upon it that, under this treatment, their losses were many times less than when closely sheltered.

As well as I can judge from the observations and experience of different farmers, a medium practice is to be preferred; and that is, to have sheds connected with the sheep-yards and open to the South, where the sheep may take shelter when they choose. It is natural to suppose that they are the best judges of their own comfort. From snow, even from severe snow-storms, sheep suffer little; but heavy rains in winter, where the fleece becomes fully charged with wet, and then freezes, are prejudicial to their health, although their thick fleeces are almost as repellant of water, as the well-oiled feathers of birds.

3. CARE OF THE EWES.—The lambing season, if it be early, demands great care. Most of the farmers are accustomed to arrange for their lambs to come the last of April and through May, when the sheep can get a good bite of grass. The objections to this, are, that the late lambs do not go through the ensuing winter so well as those which come earlier; and that, where sheep are sent to a distance from home to pasture, accidents frequently occur which might be guarded against if the shepherd were at hand. On the other hand, if lambs are to come early and before the sheep leave the barn, it is desirable to have some succulent vegetable food for ewes, such as turneps or potatoes. One of the most skilful and experienced shepherds in the country, disapproves the giving of corn or rye to sheep in milk, and considers potatoes the best succulent vegetable which can be given to them. The Shakers consider a bushel of oats for sheep better than a bushel of corn. I do not know the grounds of this judgment; and, after all, it may be with them mere prejudice. They are not alone, however, in this opinion of the superior value of oats to corn, for store-sheep. For fatting-wethers, corn is far preferable. In old countries abroad, it is the practice for the shepherd, during the lambing season, to sleep in the barn, that, in cases of need, he may render assistance to the ewes during the night. It happens, in these cases, as in all others in life, that the most careful are the most successful; and that what the indolent and improvident generally denominate bad luck, is only the natural consequence of neglect and bad management.

Some farmers are accustomed to turn their sheep into pastures without water, under pretence that they get enough from the dew. There is cruelty in doing this, as sheep require water as much as other animals, and suffer severely from the privation. The habits of sheep, likewise, are particularly cleanly; and pains should be taken, whether in the yard or pasture, that they should have free access to clean water. An extensive sheep-holder in a neighboring county, has kept his sheep without salt. There can be no doubt that this is an error, and that salt is an essential condiment to their health. It is advisable to place it in their pastures in small troughs with a roof over them, that the salt may not be wasted by rains, and that the sheep may be prevented from getting into or over the trough which contains it. This is easily effected by a simple contrivance, that will suggest itself. The common practice of throwing the salt upon the ground, is wasteful, and on other accounts objectionable.

5. DISEASES OF SHEEP AND REMEDIES.—The diseases to which sheep are subject among us, are not numerous, but some of them are very troublesome. The rot, so much dreaded in England, and in which the liver of the sheep is destroyed by worms, so far as my knowledge extends, does not prevail among our flocks. For this disease there seems to have been discovered no certain remedy or preventive; and, indeed, its origin does not appear to be well ascertained.

The foot-rot is not uncommon, and is said to have been brought into the country by the Saxony sheep. The disorder is of an ulcerous and offensive character, and first appears between the claws of the sheep, from whence it extends up the leg and assumes an aggravated form. It is extremely infectious in its character; and I have known the presence of two or three affected sheep to spread the disease among a hundred in a few days. I do not know its origin, but I believe that the seeds of the disease may lie some time concealed, without germinating. I have known a large flock to be extensively and almost contemporaneously affected with it, after standing in wet yards and after a course of high feeding. Various remedies have been tried; but all of them are troublesome in their application and not always effectual. It is important, on the first appearance of the disease, to separate immediately the sick from the healthy portion of the flock.

In all cases it is advised to cut away the diseased parts, and to make the foot as clean as possible. I shall give the prescriptions of three of the largest and most successful managers of sheep in the Union—H. D. Grove, of Hosick, N. Y.; Dr. Jarvis of Claremont, N. H.; and Sam. Grant, of Walpole, N. H.

1. Use blue vitriol and tar. If the disorder is very severe, use aqua fortis diluted with an equal quantity of water, and apply one or two drops to the lame part. In all cases the foot is to be made as clean as possible.

2. Use ¾ lb. blue vitriol, ¼ lb. verdigris powdered. Pour on them one pint of vinegar made hot; add ¼ lb. of soap. Apply this to the feet, particularly between the hoofs, with a sash brush.

3. Take of tar, tallow, and sulphur, equal proportions, well mixed, and apply it to the foot. It forms a salve. It must be sufficiently warmed to mix easily, but must not be made hot.

4. The subjoined are the remedies of an experienced English shepherd.

"The lame sheep being separated from the rest of the flock, the hoof must be cut away with a sharp knife, (called a sheep-foot knife by cutlers,) as far as the disease has spread, and which may be traced by its becoming divided from the internal parts: this must be particularly attended to; for unless the sore is probed to the bottom, no application will be of service. When this is done, the subjoined ointment will often prove effectual at one application. It is wrong to use too strong a caustic, as it dries up the surface too quickly and matter forms beneath.

Blue vitriol half an ounce; gun powder one ounce:—rubbed together into a fine powder and mixed with hog's lard sufficient to make the whole into the consistency of paste.

5. Sugar of lead one ounce; verdigris half an ounce; blue vitriol half an ounce:—formed into a paste the same as the other."

The disease will require prompt attention, and the applications must be repeated while there are indications of it remaining. It has been found beneficial to spread the stables where the diseased sheep stand with newly-slacked lime. If the disease is prevalent among a flock of fatting sheep, all hope of their thrift during its continuance must be given up. If it prevails extensively among store-sheep, it will be expedient, as soon as practicable in some honest way, to get rid of the flock; and caution should be had not to place a new flock in a pasture from which a diseased flock have been recently removed. Let at least one winter intervene.

Sheep suffer likewise not unfrequently from the scab. For this the following remedies have been given me by experienced shepherds.

1. Take 28 lbs. of leaf or 50 lbs. of stem tobacco, and put them into five pails of water; with two or three junk bottles of spirits of turpentine. Wash with this once in three days for a fortnight, if necessary. When the skin becomes clear, the cure is effected.

2. Take 5 lbs. of hog's lard; one ounce of corrosive sublimate and some sulphur. Let these articles be well mixed. This is a good application when the wool is short.

3. Take roots of the weed hemlock, *(cicuta;)* make with them a strong decoction; or use tops in the same way if the roots cannot be found; wash the sheep well with it.

A very good farmer in Conway has found one quart of sulphur mixed with four quarts of salt an excellent remedy for the scab, and generally beneficial to the health of sheep. It is left in the troughs to be eaten at their pleasure. Another farmer in the same town speaks highly of its efficacy. It is said to be much used in the sheep districts of Vermont.

For snuffles, rub the nose of the sheep with tar.

It is not within my province to go fully into the subject of the keeping of sheep, but to record only such facts and suggestions of a practical character as I have gleaned from the habits of farmers in the course of my survey, and as appear to me important. For the management of the other disorders of sheep recourse must be had to other authorities. I shall only add that, in respect to many of them, their causes and occasions are to be found in the improper treatment which the sheep receive. Sometimes they are fed to repletion; at other times they are as narrowly stinted. Their food is sometimes of the best, and often of the worst description. What flesh they gain in summer is frequently lost by the severity of their usage in winter. But few persons take pains to cultivate a supply of succulent food for them, but confine them entirely to dry fodder; whereas ewes in milk particularly require some succulent food.

6. General Management.—The success of one shepherd of my acquaintance is so remarkable that I deem it proper to record even some minute circumstances in his management. He allows one hundred acres of pasture to three hundred sheep. The propriety or expediency of such proportions, must, it is obvious, depend upon the quality and condition of the land, and the character of the sheep placed upon it. At the lambing season, he gives the ewes a small quantity of oil meal and oats, and is sure to salt them once a week. The oil meal he regards as very useful. His ewes in lambing, and with their lambs after lambing, are perfectly sheltered in a warm and close stable, and his lambs are all numbered by him on the side as they come, and are fed every evening, late in the evening, from a bottle with cow's milk. Being numbered, he is not likely to miss serving them. By this extraordinary care and attention he is saved from any loss of lambs, and they come into the pasture vigorous and active. The preparation for marking his sheep and lambs consists of three parts of rosin; one part of tallow; and lamp-black as much as needed.

In washing before shearing he recommends dipping in succession the whole flock; and, after they have stood some short time, to wash them thoroughly one by one, where it can be done, in running or falling water. The condition of, and price always obtained for, his wool are conclusive tests of the excellence of his management; and likewise the remarkable fact that, although his flock is of the fine-wooled Saxony, he frequently raises more than one hundred lambs to one hundred ewes; and a death among his lambs is a rare occurrence. He is of opinion that one ton of hay will winter ten Saxony sheep.

A good farmer in Heath and another in Leyden, experienced and well-skilled in the management of sheep, use boiled potatoes mixed with meal and made into thin swill for their ewes before and at the time of lambing.

The county of Franklin is in many parts well adapted to the raising of wool, and to the sheep-husbandry generally; to the raising of early lambs for the market, and the fatting of wethers. This applies particularly to the hill towns. Pasturage is there in many cases distant from the habitations, and mountainous; on these accounts sheep are to be preferred to any other stock. It is believed, likewise, that sheep will, upon the whole, yield a better return than any other stock. The low price of wool, operates as a great discouragement; but this kind of stock is of easy management, and the returns are, in general, quick and certain. Of the kind of sheep to be chosen, the intelligent farmer will, without difficulty, determine from the facts which I have stated in the preceding pages. Success, however, is certain only to exactness, care and vigilance. It is, I think, especially to be desired that farmers in the sheep-husbandry should go largely into the raising of roots—potatoes and turneps especially, both the white flat turnip and the ruta-baga; by this means they will very much increase their ability of keeping, and consequently may extend proportionately the numbers kept; and likewise very much improve the condition of those which are kept.

The use of the ruta-baga is objected to by many farmers on account of their injuring the teeth, or making the mouths of the sheep sore; for this reason they should be cut fine, and not given whole, as is done by some. Several machines have been invented for this purpose, varying in price from two to ten dollars. A machine with a four-sided box tunnel-shaped, like the hopper of a mill, and placed over a cylinder made to revolve by a crank, and with four thin knives placed lengthwise and obliquely upon it, may be made at a small expense, and will be found useful and effectual. The English farmers are supposed to have great advantage over us in their climate allowing them to feed their turneps in the field without drawing them. In this case the field is divided into different compartments by moveable fences, and the sheep placed successively in the different enclosures. The turneps are eaten where they grew, and the manure deposited upon the field. But many even of the English farmers, in spite of the supposed advantages of this method of feeding, deem it better to draw and house their turneps, so as to feed them out at pleasure in well-littered enclosures, where the sheep may be carefully looked after; the straw of the farm converted into most valuable manure; the manure applied when and where it is most needed; and the great waste avoided which must be suffered in the other case from the turneps being scooped out by the sheep, and much of them being trodden under foot, or left to waste.

The introduction of the South-Down sheep, to which I have already referred, into the county, would be a signal advantage, as they seem extremely well suited to this locality, on account of their compactness and hardiness, the ease with which they are kept, and their returns in wool and mutton.

6. Yield of Wool.—The largest average yield of wool that I have ascertained in the county is from the sheep of Polycarpus Cushman, in Bernardston, one among the best farmers in the State. A flock of 200 sheep, of three-quarters Merino and Saxony blood, averaged 3 lbs. 3 oz. each, well washed wool. Mr. Cushman was anxious to ascertain if any loss was occasioned in the weight of wool by keeping, a matter on which opinions have been various. A large parcel of wool, closely stowed away in a tight building, was found at the end of the year to have lost, in weight, 13-16ths to one hundred pounds; a little more than 3-4ths per cent.

APPENDIX.

I subjoin a communication from William Jarvis, American Consul at Lisbon, in 1809-10, and then a large purchaser of Merino Sheep to be sent to this country. He is now an extensive farmer in Wethersfield, Vermont; and has as good sheep as are to be found. I have never seen sheep in better condition. Two other communications follow from Henry D. Grove, a native of Germany, bred a farmer and a shepherd, and at one time President of the New York Agricultural Society. Such men are a great acquisition to the country and do much for our agricultural interests. No man is more competent to speak with authority in these matters; for no man's flocks are better managed or make better returns. I have had repeatedly the pleasure visiting his premises, and of being instructed by their excellent condition.

Two of these communications were addressed to Benton & Barry, who published Statistical Accounts of the Sheep and Woolen Manufacturing Establishments in the country, in 1816; a work of great labor and value, showing in a striking manner the great importance of this interest.

I.—Extracts from a letter of William Jarvis to Benton and Barry.

"Out of a hundred Spanish Merinos five may be selected that are a shade better than the rest, and five that are somewhat inferior; the other ninety will be so nearly alike as to the quality of the wool, as to leave but little other choice than what arises from shape and size. A question will very naturally arise here, how it happens that the Spanish Merinos should be so much better built and stronger, and yield a fleece one-third heavier than does the Saxony, when the latter is derived from the same stock. This is a question of difficult solution. The best reasons that I can assign for it are, that all the feebler sheep in Spain sink under the fatigue of traveling from the winter to the summer pastures, and *visa versa*; that owing to this mode of management, the shepherds of Spain feel the particular necessity of paying attention to the strength of the male as well as the fineness of his wool; and as every attentive breeder must have observed that the most healthy and vigorous sheep carry the heaviest fleeces, the Spaniard in selecting for strength has also secured heavier fleeces. From the mildness of the climate of Spain, too, the Spaniard is enabled to keep his sheep in the open air the year round, which may also have contributed to give them a better constitution.

The climate of Saxony and the neighboring states of Germany where those sheep are bred, is not dissimilar to the northern part of the state of New York, and the southerly part of New England, in which shelter is necessary to defend sheep against the pelting storms in winter. The Saxons, too, carry this system of housing far beyond us; they are not only very careful to have warm shelters in the winter, but most of their breeders build sheds in their pastures, into which their sheep are driven during the stormy weather of spring, summer and autumn, being only let out a short time to feed in the fore and afternoon while the storm lasts. This treatment alone would enfeeble the constitution of those animals. Owing to the very low price of labor in Germany, too, their flocks are constantly attended by shepherds, whose watchful care makes it of less consequence to have vigorous lambs and healthy offspring, than it is in Spain, particularly as in Saxony the sheep are not pastured at a great distance from the winter establishments. For these reasons the Saxon breeders have not found it so necessary to pay as much attention to the strength of the sheep as in Spain, and it is probable, therefore, that the principal object with them in the selection of both the male and female, has been the fineness of the fleece without any great regard to the animal's constitution. But whatever may be the cause, it is certain that the Saxony wool is somewhat finer than the Spanish. This fact partly answers your question, whether the wool of the imported sheep has deteriorated in this country. Twenty-five years experience satisfies me that the wool of the Spanish Merino has rather improved. About six years ago, I compared my merino wool with fifteen or twenty samples of the Paular flock that had been sent me from Spain, where I purchased; and eight or ten judges who examined the two, gave a decided preference to that taken from the backs of my sheep. Mr. James Shepard, when he carried on the factory at Northampton, and who purchased my Merino wool for several years, told me that the superfine broadcloths made from my wool, handled softer than did those from the best imported Spanish wool he could purchase. Where the Merino has been bred with attention and care, the wool has not deteriorated in any other country beside England, and the deterioration there has unquestionably been owing to the uncommon humidity of that climate.

You next inquire, what is my particular mode of management. I at an early day became satisfied, that if the Merino could not thrive under a similar management to that which our good farmers afforded to the native breeds, they would never become popular in this country. I therefore adopted a management similar to theirs, and happily found that they throve under it beyond my most sanguine expectations. Attached to my barns I have sheds connected with large yards; in those yards I placed my racks, and carry out the hay and put into them morning and evening for their food; at noon I give them a gill or a half a pint of oats a head in troughs; if a half pint of oats is given, a little less hay is fed out, if a gill, a little more; about two pounds of hay with a half pint of oats per head per diem, will keep them in good case, or about two pounds and a half of hay with a gill of oats. When I have an abundance of hay, I give no oats, but feed out about three pounds of hay per day, at three times, morning noon and night, although I think it makes but little difference whether this quantity is fed out three times a day or twice, for it must be remarked, that when sheep are in pasture they rarely feed from ten till three or four o'clock in the afternoon. I leave the doors of my sheds open, and let the sheep go in and out when they please. My sheds are occasionally strawed to prevent their becoming very filthy, and there is no waste in so doing, as all the best of the straw the sheep will eat before laying upon it.

I am careful to have water both in my yards and pastures, as I think water essential to health as well as thrift. If the hay was well salted when put into the mow, no salt will be necessary; if not they will require salting weekly. My rule is to take them up in the fall when the grass ceases to be nutritious, owing to severe frosts, which is ordinarily about the 25th of November, and never let them go out

of their yards until I turn them to pasture in the spring, which is commonly about the 25th April to the 5th May, according as the grass is more or less advanced. Some attention ought to be paid to the ewes in the lambing season, and in cold easterly storms, or in heavy rains they ought to be housed at night, when the lambs are young. During the rest of the season no attention is given to them except what is necessary in shearing, and to salt them once a week and see that the fences are up. It is better to salt them in long narrow troughs than on the ground, as they waste less, and all get an equal share. Six by six slit work, dug out triangularly with an adze, makes the best troughs for salting. I ought to have mentioned above, that if corn is given, only half the quantity is required that it does of oats, but I think oats are better for sheep. Between the 1st and 10th of May I think the best season for lambing.

My remedy for foot-rot is, three parts of blue vitriol and one part verdigris, pulverized as fine as Indian meal, then put in sharp vinegar made as hot as water with which we commonly scald hogs, not boiling, and pour in as much vinegar as will make it of the consistence of thick milk, stirring it briskly all the while; clean the hoof with a knife, and put on the mixture with a small paint brush, taking care that it comes in contact with the inflamed part; it is also better to put it on the sound hoofs of the affected sheep as a preventive. Strong tobacco liquor is the best cure for the scab, immersing the sheep all over except the head, and scrubbing the part well that is affected. This remedy does best directly after shearing, but will answer any time during the summer or fall months; for lambs liquor must be much weaker. For bloating, the best remedy is a great spoonful of castor oil, mixed with a tea-spoonful of pulverized rhubarb, and about a gill of hot water, which may be put down the sheep's throat with a great spoon."

II.—LETTER FROM H. D. GROVE TO BENTON AND BARRY.

Gentlemen:—I will endeavor to give you an outline of the history of the Saxon Merinos, their introduction from Spain into Saxony, and subsequently into the United States, with a few remarks on sheep husbandry.

In the year 1764, the Elector of Saxony obtained, by special negotiation through his ambassador, a grant from the king of Spain, for the purchase of one hundred ewes and one hundred rams, and a few surplus ones to keep that number good in case any should die during the passage. Accordingly one hundred and nineteen ewes and one hundred and ten rams were selected, principally from the Escurial flocks, the king's private property, under the care and management of the monks belonging to the monastery of that name, and which were considered the finest sheep in the kingdom. They were shipped at Cadiz, in the month of May, 1765, accompanied by two Spaniards to take care of them. Five rams and three ewes died on the passage; the remainder arrived safely at the Elector's private domain at Stolpen. The Spanish shepherds remained with, and took care of the flock till the middle of the following year, when they took their departure for Spain. During the time, however, they remained in Saxony, they instructed Saxon shepherds in the care and management of sheep.

In order the better to make this valuable acquisition benefit the country as much as possible, the Elector appointed a commission to superintend and direct the general concerns of the sheep establishment, whose particular duty it was made, to spread all the information they could obtain on the care and management of sheep before the public, and who were especially instructed to dispose of the young rams at low prices, in order to induce the sheep owners to improve their flocks. The tenants of the government domains were particularly favored, by giving them the preference in the purchase (which is kept till this day,) while every possible care was taken to induce farmers generally to improve their breed of sheep throughout the Electorate. It wat further required of the said commission to make a detailed report to the government annually, on the condition of the sheep establishment, and at the same time to submit a list of the persons who had received sheep from the national flock.

During the first years these valuable animals found many opponents, and the improvement of the Spanish flock was very slow, mainly on account of the common prejudice of the farmers, which was heightened when the scab broke out among them, but afterwards they became convinced of their value, and the improvement was more rapid. But as most of the flocks in Spain are more or less affected by the scab, those transported to Saxony had to undergo the same ordeal. This of course heightened the prejudices of many against them, who pronounced them entirely unfit for the country, their meat not eatable, or at best, of a miserable description; a notion however, which soon exploded. The scab, however, caused great ravages among them before they were entirely cured of this disease.

When the commissioners had exercised their functions ten years, the calls for young rams were so great,—and in order the more rapidly to improve the breed of the country—that they resolved to petition the government to make another importation of ewes and rams from Spain, for which purpose the Elector obtained another grant from the King of Spain for three hundred rams and ewes. At the end of the year 1777, a gentleman by the name of Vaigt, manager of Count-Eiorsidel's farms, who was considered one of the best judges of sheep at that day in Saxony, was provided with the necessary credentials and sent on that mission. But, for some cause unknown, he selected only one hundred and ten two-years old rams and ewes, and returned home with them. These were, however, of a very superior quality, selected from the best flocks of Leon, Escurial, Cavagnon, Negretti, Montarco and Sorian, and exceeded greatly in beauty of form and quality of wool, the first importation. The cost of them was about forty rix dollars per head.

With this acquisition, the commissioners then planted the Merino Tree on the fruitful soil of Lohmen and Rennersdorf, from whence in conjunction with Stolpen, many pure blood flocks derive their origin. And I owe it to truth to remark, that I have examined private flocks equal, if not superior, to the national flocks.

It would lead me too far here, to detail the introduction of the Spanish and Saxony Merino, into other parts of Germany, Prussia, Austria, &c. Suffice it to say, that many districts rival Saxony; Prussia, especially, fosters her flocks, not only by premiums bestowed through her agricultural societies, but by that enlightened protection to domestic industry, which so truly characterizes that government.

It may, perhaps, be supposed, that as these kinds of sheep are greatly increasing in number, they would depreciate in value. This however, is not the case; for the prices at which they have been selling for the last twenty years, far exceed those of any period previous. So highly are they esteemed in Europe, that they have been transported to almost every corner where sheep can be raised to advantage: they have been transported to Russia, and some of her possessions in Asia, to New South Wales, and my Leipsic correspondent informs me, that in October and November last, (1836) six hundred rams and ewes were exported to Buenos Ayres; and but a few years since, old Spain, the mother country, from whence the fine sheep in Germany date their origin, has imported bucks from Saxony for the improvement of her flocks. The exportation of wool is very great, the amount in 1835 to Great Britain alone, was 24,000,000 pounds, and considerable quantities are exported to the Netherlands, France, and America, supplying at the same time her own factories, which are not inconsiderable, and which turn out a fabric that exceeds, for durability, that of England or any other country. It will be readily admitted that these sheep are a great source of wealth to Germany, and especially in those districts where they are raised to the greatest perfection and purity; and probably will continue to be so for a great many years to come. The demand for the pure race is great and constantly increasing; and I have been informed by my friends in that country, that the supply has not been equal to the demand for the last three years.

A person not acquainted with the system of breeding sheep in Germany, may perhaps be led to doubt the vast difference that is made there in the price between the pure race and those of the mixed, or cross-breed sheep, though possessing many excellences. Yet such is the case. My friends in Saxony write me, that two hundred and fifty rix dollars have been paid for individual rams within the last year, and I have known of much higher prices having been paid. Those of the mixed, or cross-breed race are comparatively low, and can be obtained at from three to fifteen rix dollars (the maximum price) per head, according to quality and goodness, and among these are very often individuals possessing all the characteristic excellences of the pure race. Yet they are not so valuable for breeding. Here arises a question, why the fine sheep are so much higher in Germany than in this country? The answer is, that capital is so abundant and the rate of interest in that country so low, that it is more profitable for agriculturists to invest part of their surplus capital in fine sheep than to let it out at simple interest.

I have been thus particular in giving you an outline of the introduction of the Escurial Merino sheep into Germany, and the high estimation in which the now called *Escurial Saxony* sheep are held in that and other countries, as many of our farmers have not a correct idea of the origin of the Saxony Merinos; and as a fear has often been expressed, that the growing of wool will soon be overdone and not be worthy the attention of farmers. To those let me answer, that fifty years ago similar fears were entertained in Germany, but that experience has proved them groundless; and that, whenever that time arrives, it may fairly be presumed that all other agricultural pursuits will be in a similar condition.

I will now briefly notice the introduction of the Saxony Merino sheep into this country. The first importation of which I have any positive knowledge was made in 1824, by Messrs George and Thomas Searle, merchants of Boston, [though I have been informed, that at the instance of Col. James Shepard, of Northampton, a few were imported in 1823, as an experiment,] of which I had the care and management. They stood the fatigue of the voyage remarkably well; there were only seventy-five ewes and rams, of which I owned a few myself. The whole cargo was sold by public auction in Brighton near Boston, and were scattered in various parts of the country, but mostly in the New England States and the State of New York. The following year, (1825) another importation of one hundred and eighty rams and ewes, and a few lambs, was made by the same gentlemen, in which I was concerned, and came out also under my care and management, and were likewise sold by public auction, in Brighton, near Boston. They sold, however, much higher than the first importation; several rams brought as high as four hundred dollars a head, and one sold at four hundred and fifty dollars.

These prices were sufficient to excite the spirit of speculation, and consequently the year 1826 witnessed the arrival of Saxony sheep in Boston and New York, and other ports, to the number of two thousand five hundred ewes, rams and lambs. Many of these sheep were well descended and of pure race, but a great share, I am sorry to say, *were not so*. It is certain that many—I might say some entire cargoes—were imported and sold for the "*pure Electoral Saxon sheep*," that were only of cross breed and some of them as low as three quarter blood, or as a German shepherd would say, "*of the second generation*." It is to be regretted that the importation of the Saxony sheep became a speculation, for it not only retarded the improvement of sheep in this country, but it is a positive injury to those who may possess the pure race. The importations being large, prices declined greatly and many importers suffered great losses. There were several cargoes which sold for about fifteen dollars per head, which was insufficient to cover the expense of transportation.

The different voyages to this country, and traveling in the interior, satisfied me that the Northern and Middle States, as far as I examined the soil and climate, were exceedingly well calculated for the production of fine wool, and would, in time, become decidedly wool-growing States. Upon which I made up my mind to settle in this country, and being fully satisfied that the raising of fine wool would be a profitable business for farmers to pursue, I determined to make an importation for the purpose of breeding from them, and establish myself as a wool-grower. For this purpose I embarked at New York in the fall of 1826 for my native country, and spent the winter following to select my flock. I landed with them in New York in the month of June, 1827. It consisted of sixty yearling ewes, twenty-five rams, and twenty lambs, and I drove them into the section of country where I now reside. I 1828, I imported an addition of forty yearling ewes, twenty rams, and ten lambs, to my flock, which, added to the importation of 1827, made one hundred ewes, forty-five rams, and thirty lambs.

With this number I laid the foundation of my Electoral Saxon flock, which I have maintained in all their purity, and visibly improved them. Their descendants not only are as fine as the original stock, but they yield more wool, and are larger and better shaped sheep. The whole number of Saxony sheep imported amount to about three thousand.

It has frequently been asked, "Whether as fine wool can be grown in this country as in Saxony?" Of this I do not entertain a doubt. Ten years' experience has fully satisfied me on this point. In some respects this country possesses natural advantages over Germany, and with the same care and management, we can grow as fine wool here as there. There, pasture lands in many sections are superior. Maine, New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, &c., afford by nature a healthier herbage, though not so much, as the best sheep district in Germany; for instance, Saxony. There, in wet seasons, many flocks are subject to the rot, a calamity which is almost a stranger to our flocks, and need never occur if proper precaution is taken. This is an important consideration in our sheep husbandry, and after there shall have been generally introduced the German mode of sheep husbandry, as far as applicable to the condition and situation of our country, we shall be able fully to compete with them.

It is an important consideration to keep sheep in a thriving condition the whole year round. First, it improves the quality of the wool; secondly, it increases the quantity; thirdly, less sheep are liable to die; fourthly, the increase of lambs will be greater. Wool from sheep thus kept, possesses more elasticity, strength, and better felting properties, than if kept poor, and consequently makes a stronger and more durable cloth. To keep sheep too fat depreciates the quality though it increases the quantity; but to keep sheep too poor injures the quality and diminishes the quantity; besides which, it is injurious to the constitution, and if kept so for a number of years in succession, will run them down into a diminutive little animal. Extremes should be avoided—many of our wool-growers keep their sheep part of the year in a fleshy condition, which generally is in summer, and during the other part let them grow poor. This course of treatment is very injurious to both animals and wool. When shorn, such wool appears of a better quality than it actually is, and deceives those who are not judges of the article. There are, in fact, two different qualities in the same staple (in the length of it,) the growth during the first part is coarser than during the latter, and though it appears finer, yet it is not so strong, but is feeble and makes an uneven fabric. If sheep are kept too poor they produce a wool, poverty-stricken, and though it appears very fine and of superior quality, yet it is deceptive, and the quality is not so good as if the same sheep had been kept in good and thriving condition; it is deficient in elasticity, strength, and the felting properties, and is feeble; the cloth itself made from such wool, is feeble, and frequently tears before it is finished.

Wool from diseased sheep is poorer still; the quality is greatly injured, is subject to waste in the process of manufacturing, and never makes a perfect fabric, but makes a feeble cloth which easily tears. Wool from sheep that have died is likewise injured for it seems to become in a measure lifeless. Cloth made from such wool is said to be much more subject to the depredations of the moth than cloth made from live wool, shorn from healthy sheep. This article is well understood in Germany; the manufacturers pay but two-third prices for such wool. The discrimination in the selection of their wool is, probably, the reason why the German cloths are so much stronger and more durable than the English or American cloths.

I repeat, therefore, that it is very important to keep sheep in good and thriving condition the whole year round. And in order to do this, they should have sufficient food to fill themselves twice a day. In this country this is done on pasture and hay. In Germany the keeping of sheep is based upon the same grounds, but it varies in many respects. I will mention a few of the leading features.

The Germans keep their sheep under comfortable shelter during the winter. By this means they do not require, in the first place so much provender; second y, the tip ends of the wool do not get weather-beaten, which is an injury; thirdly, a great quantity of manure is saved. They hurdle their sheep during the summer for the purpose of manuring the land, which makes it more productive. They raise large quantities of roots, such as ruta-baga, potatoes, mangel-wurtzel, carrots, round turneps, &c., to feed out during the winter. Combined with straw, it is considered an economical mode of wintering sheep. They enrich their land, moreover, by this course of management, which enables them to keep still more sheep and cattle, and raise more grain. Many farmers in that country keep their sheep from nine to ten months of the year in the yard; some only part of their flock, and others their whole flock. For this purpose, they sow red and white clover, lucern and Esparcette, which is mowed and fed to them in racks, three times a day, and in wet weather a foddering of straw. It follows, as a matter of course, that the stables and yards are well littered with straw every day. It is considered that an acre thus managed, will maintain double the number of sheep or cattle, than it would to turn them out to pick for themselves. By this course of management they are enabled to keep large numbers of sheep without infringing much upon their grain growing and are enabled to come in competition with the wool-growers of other countries. As there are no fences in that country, the sheep are attended by shepherds. One shepherd with his dog will manage from five hundred to eight hundred in the summer, all in one flock.

This mode of keeping sheep during the summer season is however, not altogether practicable in this country, for the reason that pasture lands are cheap and labor too high. Yet there are some particular locations, where, on a small scale, it might be introduced to profit. But the German mode of keeping them during the winter, is a subject worthy the imitation of our farmers, and is altogether practicable.

I calculate upon two pounds of good hay per head per day, for my Electoral Saxon Sheep, or an equivalent in grain, roots, or straw. This will keep them well. I oftener undergo than overrun that quantity. If I give them grain or roots, I deduct from the hay in proportion to the quantity of grain. My breeding ewes I feed part of the time on roots, and straw, and hay, at the rate of three bushels of potatoes per hundred per day; about a month before lambing I increase this quantity, and during lambing from four to four and a half bushels per day are given. When through that period, I gradually decrease until I turn them to grass. Sheep thus kept, hardly ever scour in the spring of the year. I raise from eighty-five to ninety lambs from an hundred ewes on an average. Sometimes a lamb from every ewe that yeans one.

I have comfortable shelter provided for all my sheep, with a cellar attached to it, for the purpose of storing roots. I feed altogether out of racks, with troughs attached to them, for the purpose of feeding short provender, and to catch the leaves that may crumble off, and the hay the sheep may pull through. Eight tons of hay fed to sheep in this manner is of as much benefit to them as ten tons fed in the open field from a stack.

My lambs are yeaned the latter part of April and the fore part of May. At four months of age I wean them and put them in the best pastures I have, and put the ewes in the shortest feed for a short time, in order to dry up the milk. I have never had any sheep's udder injured in this manner; but if they are turned into fresh feed, a large quantity of milk is produced, which is very painful to the ewe, and frequently injures the udder.

I think it of importance that sheep should have free access to water every day, but especially during the foddering season.

Sheep are subject to various diseases the most formidable of which are the rot, scab, and foot-rot. Time and space will not permit me to treat upon them to-day, but I may perhaps give my views on this subject at some future time.

Very respectfully, H. D. GROVE.
Hoosick, (Buskirk's Bridge Post Office,)
Rensselaer county, N. Y., 24th June, 1837.

III.—LETTER FROM H. D. GROVE TO H. COLMAN.

Buskirk's Bridge Post Office,
Washington County, N. Y., 13th Jan. 1839.

H. COLMAN:

Dear Sir—It is now more than eleven years ago when I landed with my flock of Electoral Saxon Sheep in this country, and have ever made it my unremitting attention and study to preserve them in all their purity, to improve the quality and quantity of their fleece, and to improve them in size and symmetry of form. How far I have succeeded, I leave for impartial judges to decide. But you will, nevertheless, permit me here to remark that I have improved the quality of their wool considerably, and that I have increased the weight of fleece at least 6 ounces on an average. I mention this, merely to repeat an established fact that even the high-bred improved sheep, is susceptible of still further impovement.

Previous to my coming to this country, I followed the profession of agriculture in Germany. The fine-wooled race of sheep especially, attracted my particular attention; but not until I made several journeys into different sheep districts in that country and examined a great many flocks which excelled in excellence that my predilections in favor of this interesting and very useful animal were more particularly aroused. Being permitted to examine the flocks of some of the most eminent breeders, their courtesy and liberality to communicate their experience and observations, exact experiments and their results, gave me advantages for acquiring knowledge on this subject, for which twenty years' experience in my individual flock would have been insufficient. I could make comparisons between the different modes of breeding, and noted the favorable and unfavorable results, but I always found, that where the mode was based upon scientific principles, the improvements were much more rapid than when bred on the hap-hazard plan.

One of the modes of the systematic breeders in Germany is an exact classification of his flock, and the keeping a correct record of it. Since the introduction of this system in Germany, the improvement of sheep took a new start and was much more rapid than it ever was before. Those flocks where it was first introduced, soon went ahead of others, and it was not long before most of the owners of fine flocks followed their example.

The first class is denominated "Super Electa;" second class "Electa;" third class "Prima;" fourth class "Secunda;" fifth class "Tertia;" but many have more than the first four classes, any individual falling below the last, is at once rejected and disposed of. Three small samples of wool, one from the neck, one from the shoulder, and one from the thigh, are taken from each sheep (they should be cut off with a pair of scissors and not pulled out) and rolled up in a piece of white paper with the number and age of the sheep marked on it. In order to make the classification with accuracy the animal is placed upon a table made for that purpose and held by a man, so that the examinator has a fair chance to view it critically. A clerk with paper, pen and ink, is in attendance, who notes down the texture of the staple, whether long or short, round, flat, or spiral, exterior appearance of the fleece, evenness, size and shape, &c. &c.

Every sheep is numbered and recorded in a book kept for that purpose, which is called the "Sheep Register." It is done by making notches and holes in the ears, an ingenious method, invented and brought into notice by the celebrated agriculturist, Mr. Albrecht Thaer, of Marglin, near Berlin in Prussia, to whom the agricultural community of Germany and even adjoining States, owe a debt of gratitude for the light he has spread upon the subject of agriculture.

In my own flock the notches denote the number, and the holes the age of the sheep. When my lambs are one or two days old, I number and class by them. The first ewe lamb is number one or the lowest number, and the last one the highest number. In like manner I number my ram lambs. They are all recorded in a book, which I call my "Breeding Register," which forms part of my main book, "the Sheep Register." This book I carry to the stable with me, sometimes every day, and sometimes only every other day during lambing time, and for convenience sake, make my remarks with a pencil which I afterwards fill out with ink. The whole is then transcribed into the "Sheep Register."

The Breeding Register presents the following columns:

Breeding Register, from 1st July 1838 to 1st July 1839.

No.	Year in which born	Tup'd by Ram No.	Date of Lambing	No. Lambs. Rams	No. Lambs. Ewes	Classification of the Lambs &c	General Remarks.
25	1833	2 7-4	6-4	1	-	1 Cl. small and close curled.	Thin lambs—one rey feeble and died.
1	1824	2 6-4	7-4	-	1	2 Cl. middle, small curls.	Lamb has a few hairs under the belly, &c.

This is the form in which I keep this book.

In the first column is the number of the ewe; in the second, her age, and instead of writing it out in full, I merely write 3, 4, 5, and 6, which means either 1833, 34, 35, and 36, &c. In the 3d column is the number and age of the ram, thus 27-4—27 means the number, and 4 his age namely, 1834, &c. In the fourth column is the day and month when the lambs yeaned, thus 6-4—6 means 6th day, and 4 fourth month. In the fifth and sixth columns are the number of ram and ewe lambs. In the seventh is the classification of the lambs, when one or two days old, and the last column is for general remarks.

I am very particular in classifying my lambs, with as much accuracy as possible, to enable me to decide upon the good or bad qualities of a progenitor as a breeder; if his progeny is not such as I desire, I reject him at once from further service. I do not often use my rams after they are 5 or 6 years old, for when they have attained to age their progeny begins to fail in vigor and strength. Much, however, depends upon the treatment he receives. If a ram is carefully used, not *over-worked* he will retain his vigor and elasticity much longer, and I have known rams 7 or even 9 years of age whose progeny was as vigorous as that from a ram of 3 years old.

I select my stock rams with the greatest care, for I consider this the most important point in breeding; and here I find my records of great value in aiding me to make the best choice. If, for instance I have a ram before me who has, in every respect, the requisite qualities, and turning to my records, I find his ancestors occupy a high rank, that is, stand in the first class for a number of generations back. I then have no hesitation to appoint him a sire for my ewes, and in nine cases out of ten, he acquits himself to my entire satisfaction. Or, if I have two rams before me of equal quality and hardly knowing to which one to give the preference my records decide the question, for the one who has got the best ancestry is preferred to the other.

The experienced shepherd knows that even in full-blood flocks not all individuals are equal in quality of wool, size, form, &c., but that some families arrive to much greater perfection than others. Here again my records are of great value, for with their aid I can designate every individual member of each family, and cross them with other families, and in such divisions I think most beneficial. For eleven years have I thus managed my flock and selected my stock rams from those of my own raising, and yet I have no very near relationship, and I can go on eleven years more in the same manner and avoid that error; only taking a little more trouble, and some years use more rams than to a superficial observer would seem necessary. Now if my sheep were not numbered and recorded, I could not go on without running the risk of injuring my flock by too close breeding. This is an important point in the principle of breeding domestic animals of all kinds, and if once lost sight of the injury will soon be perceived by the experienced and discerning eye; often the injury is irreparable. That it is lost sight of and is overlooked by too many of my brother shepherds is but too true, and this is one reason why so many make but little progress in the improvement of their flocks. These considerations lead me to the principle of what is termed, *"breeding in and in,"* a principle that embraces much, and is but little understood by the great mass of our farmers, but which for want of time, I must pass over in silence.

I have said before, that my sheep are all numbered by making notches in the ears. For this purpose, I have a pair of instruments resembling a shoemaker's punch. With one I make a round hole, and mark the age; and with the other a notch, the number of the sheep. These notches and holes have a permanent meaning in the different parts of the ears. A notch in the upper part of the left ear means 1. A notch in the lower part of the same ear means 3. A notch in the upper part of the right ear means 10. A notch in the lower part of the same ear means 30. With these figures you can mark from No. 1 to 99. A notch in the end of the left ear means 100. With this additional notch you can mark from No 1 to 199. A notch in the end of the right ear means 200. With this additional notch you can mark from No 1 to 399. Two notches in the end of the left ear, means 400. With these additions I no ches you can mark from No 1 to 499; or instead of the notches cut off the end of the left ear, and you can express the same number. Two notches in the end of the right ear means 500, or cut off the end and add one notch in the end of the left ear, and you have 600, and can mark as high as 699. You can go higher by making the end of the left ear cut off mean 600, and of the right ear mean 700. But by the time one gets a flock of sheep large enough to raise 699 ewe lambs, and as many ram lambs yearly, it will be found that he has got over 4,000 sheep, and the sheep establishment becomes so unwieldy, that it will be necessary to organize a new one. But few flocks in Germany having attained that number are kept on one farm. I know of none in this country.

The age of my sheep I mark, by making holes in the ears, when they are one year old. A hole in the left ear means 1. A hole in the right ear 3, Thus, if a lamb is born in 1838, it gets two holes in each ear. One that is born in 1839 gets three holes in the right ear, &c. &c. Lambs that are born in 1840, 50, &c., do not receive any holes. And after a sheep reaches the age of ten years, she is generally unfit for further service, though I have had several ewes that reached the age of 13, 14, and 15, and raised lambs. If, however, you retain any ewes over ten years old, you can easily distinguish them by their general appearance, and note them in the general remarks.

I intended to give you a more accurate description and more in detail than I have done, and answered the questions which you propounded, but want of time forbids me.

Yours, &c., H. D. GROVE.

RELATIVE VALUE OF DIFFERENT KINDS OF FOOD FOR SHEEP.

By M. De Dombasle.

Some experiments performed by this celebrated agriculturist, are well worthy of being recorded, as approaching nearer to an exact determination of the question of the relative nutritive properties of a few of the more common aliments of sheep and cattle than any which we remember to have seen.

He divided forty-nine sheep into seven lots, of seven sheep each, in such a manner that the total weight of each lot should be as nearly as possible equal to each of the rest. Each lot was kept in a separate division of the stable; the food was given to each lot in rations of equal weight; and by means of scales, the total weight of each lot was taken once a week, and the experiment was continued five weeks. The weight of each lot was four hundred and thirty-six pounds.

The substances subjected to examination were: 1. Dry Lucern; 2. Oil cake from flax seed: 3. Oats and barley: 4. Crude potatoes: 5. Cooked potatoes: 6. Beets: 7. Carrots.

The dry lucern formed the unit of the estimate. One of the seven lots was fed exclusively on dry lucern; and each of the six others received just half the quantity of lucern, and the remainder of the ration consisted of such a portion of one of the alimentary substances as was found sufficient by a careful weighing during the five weeks, to keep each lot in the same healthy condition. The following table shows the current progress of the experiment; the quantity of water drunk by each lot of sheep during the five weeks being also measuured by a guaged trough. The author concludes that fifteen pounds of dry lucern may be considered as a proper ration for one sheep per week, or rather more than two pounds per day. The primitive weight of each lot, as before observed, was four hundred and thirty-six pounds.

Lots.	Food.	1st week.	2d week.	3d week.	4th week.	5th wk.
1st,	Dry Lucern,	437 lbs.	433	437 1-2	437 1-2	443
2d,	Lucern and Oil Cakes,	428	428	433 1-2	439	444 1-4
3d,	Lucern, Oats and Barley,	422 1-2	423 1-2	429 1-4	436 3-4	437 1-4
4th,	Lucern and crude Potatoes	441	440 1-2	434	432 3-4	439 3-4
5th,	Lucern & cook'd Potatoes	437	435 1-2	447 1-2	441 1-2	451 1-5
6th,	Lucern and Beets,	435	424	436	437	444 1-4
7th,	Lucern and Carrots,	417	407	419 1-2	426 1-2	427 1-2

The quantity of water drunk by the seven lots during the 5 weeks was as follows, showing the relative degree of thirst occasioned by the different aliments.

1st lot 223 quarts,	4th lot 123 quarts.	7th lot 35 quarts,
2d lot 189 "	5th lot 108 "	" "
3d lot 164 "	6th lot 95 "	" "

Fifteen pounds of dry lucern being considered as a proper ration for one sheep per week, or seven and a half pounds a ration, he finds that the following quantities of each of the other aliments are equivalent in nutritive value to the half ration of lucern.

Oil cake 1½ lbs.; barley 3½ lbs.; oats 5 lbs.; crude potatoes, 14 lbs.; cooked potatoes, 13 lbs.; beets, 16½ lbs.; carrots, 23 lbs.

Thus taking the quantity of lucern as a standard, the nutritive powers of the different substances will be—

Dry lucern,	100 lbs.
Flax seed oil cake,	57 "
Barley,	47 "
Crude potatoes,	187 "
Cooked potatoes,	173 "
Beets (white variety,)	220 "
Carrots,	307 "

Bib. Univ. Mai, 1832.

The subjoined comes from a friend who has already obliged us. It proclaims the most important sentiments. They cannot be too deeply impressed upon the public mind:

For the New Genesee Farmer.

Improvement.

"Improvement" seems to be the motto of our age, and one of the watch-words of our countrymen. And strange it must seem to the aged, when taking a retrospective look on by gone years, and mark the difference between the past and the present improved modes of operation. They see scarcely any thing remaining undisturbed by the iron march of the genius of "Improvement."

In nothing are the movings of this principle more discernable than in the extended application of the teachings of science to the practical purposes of agriculture. What a vast improvement in the culture of the soil, in the different products of the same, in farm stock and implements, has already been achieved? And the extensive and extending circulation of agricultural books and periodicals show that this spirit is still moving. These improvements need the fostering care of every lover of his race, that they may spread broad and deep, and embrace in their ameliorating influence the whole agricultural community. The cultivators of the soil must, and soon will, occupy a more elevated position in society. There is a mighty spirit of inquiry abroad which will soon dispel the baneful influence of that old but too prevalent maxim, *"that to be a farmer, one needs no education."* It is this opinion that has been the chief cause of the degradation of the cultivators of the soil, which has prevented them from taking their true position in society.

Agriculture was the first occupation of man, and it is that which *sustains* all the other professions. In the words of Judge Buel, "Agriculture is the parent of physical and moral health to the State; it is the salt which preserves from moral corruption." If these principles are true, why should not the farmer belong to the first class? The great cause is his ignorance and his low idea of his own profession.

"Every boy whom you educate, you instil into him the belief that he is above the calling of his father. You teach him that the cultivation of the earth is servile. But educate him for this great employment; talk to your children of its nobility and usefulness when boys, and the next generation will not have passed away before the profession of a farmer will have become a *learned profession*."—A. C. Baine, Esq.

"This," says Mr. Tucker, the editor of that most valuable paper, the "Cultivator," "is the *true doctrine*. Let such sentiments as these become prevalent, and they offer a sure guaranty against the idea that all labor is of necessity servile and degrading. Teach mankind that there is such a thing as honest industry, honorable and useful; that success in any pursuit involves knowledge, research, thought, education, and you do much to abate prejudices and smooth the way for further conquests from the domains of error."

A free use of your "*great sub-soil plow*—universal education," will prepare the way for *improvements* in every thing else. Let us all labor that it may do its work thoroughly—turn a wide and deep *furrow*, for it is the noblest of causes. The culture of *man* will certainly be followed by the cultivation of the *soil* in an equally improved ratio. To contribute to this result is my highest ambition; and if any thing I can do will help you in forwarding the work, I shall be amply repaid. R. T. Y.

The Maples, Nov. 12, 1842.

A Valuable Cow.

Canaan Centre, Columbia Co., Jan. 18, 1843.

Sir:—In fulfilment of my promise to you, I send you some statements of the production of my cow. We made from her, last spring, in one month, fifty-nine pounds of butter, commencing the 5th day of May and ending the 4th of June. Within that time we weighed her milk for three successive days; whole weight one hundred and eighty-nine pounds, averaging sixty-three pounds per day. Some five or six years ago, in the month of April, we made in twenty-one days, thirty-nine pounds and six ounces, besides using the milk freely for the family. We also made on another trial of nine months, two hundred and seventy-two pounds, besides using milk for a family of six persons. The cow was ten years old last spring—had a calf at two years old, and has had one every year since; is of the native breed—large size—always in good condition, and has been well kept from a calf: to which cause I attribute a portion of her superior qualities and extra size; though there must be something "bred in the bone," that gives us yellow butter at all seasons of the year, and milk always nearly, and often quite, the whole year. While on her trial last spring, she was fed six quarts of buckwheat bran per day, with what hay she would eat, till grass took the place of hay.

Would not all farmers do well to keep fewer cows and keep them better? Is not one well cared for more productive than one poorly fed and attended? Is not a warm stable better than the lea side of a rail fence? Is not a good bed of clean straw better than one of manure? or, can they be as comfortable with thirty or forty pounds of it adhering to their thighs, as if they were smooth and clean as in summer? In short, does not any thing that adds to their comfort add to their production? Such treatment may be objected to on account of expense, but has the objector counted the cost? Do turneps cost more than hay? Does bran or oats and corn even? I think not, at this time. I see nothing extra but a trifle of labor and care, and does not the superior condition of the animal pay for that more than four fold?

Yours respectfully,

DANIEL S. CURTIS.

The Northampton Courier says that Mr. Oliver Warner, of Hadley, harvested the past season, from eighteen acres, part meadow land, twenty-one hundred and sixty-one bushels of corn.

POULTRY.

We publish, as worthy of observation, the subjoined articles on the subject of Poultry, not deeming it necessary to remind our readers that, according to the Scotch proverb, "many a little makes a mickle," and that small farmers must look to small savings and small gains. According to the calculation of a very exact and nice house-wife, whose eggs usually brought her 12½ cents per dozen, the profit of a single hen in eggs and chickens, was more than one dollar a head; and thi swhen corn for feeding them was one dollar per bushel. We have known, likewise, the experiment of a careful observer, a clergyman, who always gave his fowls free access to a mixture of half corn and half oats, and selling his eggs at 12½ cents per dozen, upon a trial we think of three months, he found, on comparing the amount of corn and oats consumed, with that of eggs produced and sold, the fowls paid for their provision at the rate of $1 75 to $2 per bushel for the mixture.

We subjoin a letter from a respected friend at Portsmouth, N. H., which, though it has been some time waiting for admission, will not be found out of season.

PORTSMOUTH, N. H., Sept. 9, 1842.

Mr. COLMAN—Dear Sir: When you were in this town, last spring, I informed you I had procured several kinds of hens that were much celebrated, with a view to test their several properties. I have the Malay, or Bucks county, as it is called in Pennsylvania, Dorking, Booby chicken, Creole and Poland.

The Malay is a large, noble fowl, weighing from 8 to 12 pounds. They are good layers, eggs very large, and hatch well. They are hardy; I have never lost a chicken; come early to maturity, and their meat is excellent. I should think them superior to any other breed for the market.

The Dorking sustains a high character in England, as layers, but mine have not laid better than our common hen. Their meat is fine, and they are very hardy, and might be raised for the market. They weigh from 6 to 9 pounds.

The Booby chicken is a beautiful hen; black, with white spots all over them. They weigh from 7 to 10 pounds, and are first rate layers, laying nearly every day until they lay 50 or 60 eggs, before they show any inclination to sit. The chickens are tender from a week to five or six weeks old, but seldom die after they arrive at that age.!

The Poland and Creole, as layers, are above all praise. The Poland never shows any disposition to sit—the Creole very rarely, and will commence laying in three or four days. My two Creoles, the first twenty-two days after I received them, laid 41 eggs, and 95 in 54 days. They have laid ever since, stopping occasionally a few days. The Polands lay nearly as well. Both kinds are small but very handsome. The Polands, when chickens, are tender. The Creoles are hardy. My Polands and Boobies laid through the winter. The Creoles I did not receive until May.

With much respect, your friend,
RUFUS KITTREDGE.

The following exact account, kept with a poultry establishment in Connecticut, is quite valuable, and deserves entire confidence:

May 9th.

Mr. COLMAN: Dear Sir—Agreeably to your request, I send you a statement of my poultry the past year. I had 60 hens; they have brought me 500 dozen eggs the past year. One hen stole her nest and raised 5 chickens; average price of eggs, 17 cents.

500 dozen sold at 17 cts.	$85 00
5 chickens at 2s,	1 25
	$86 25
Expense of grain,	55 00
Nett profit,	$31 25

The above statement is as near as I can get it. I have enlarged my stock this year to 85. I think of selling out my old stock about the time I mentioned above.

Yours, &c. J. S. R.

EGGS.—It is stated in the Ploughman, that E. G. Tucker, Esq. of Milton, obtained six hundred dozen of eggs, in one year, from eighty-three hens—his highest number of fowls; he sometimes had less;—that for five hundred and sixty-two dozen he took one hundred dollars within one cent. The whole amount of his cash receipts was $123 33; and his expenditures were $56 43, leaving him a balance of $66 90.

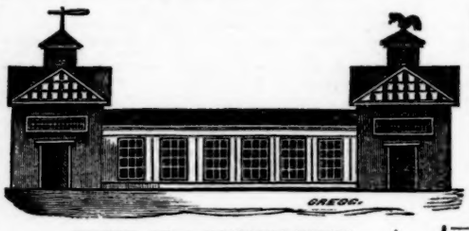


FIGURE OF A POULTRY HOUSE.

The above exhibits the front and elevation of rather an extensive and costly establishment, but would be very convenient and would add very much to embellish the premises. The buildings at the ends are intended for laying, hatching and roosting apartments. The cupolas on the tops, finished with blinds, for the purpose of ventilation as well as ornament. On the bottom of the cupolas and inside of the building is a door, hung on hinges, with a cord attached, so that it may be closed or opened at pleasure, The gable ends may be turned south, in which dove-cotes may be framed, or they may be made in the roof as in the figure.

The long building with windows in front connecting the two extreme ones, is intended for a *chicken saloon*, or *walk*, for exercise in winter, as well as for feeding, basking, &c. being made warm by filling in with brick, or lathed and plastered, and the roof should be thatched with straw. The front to be ten feet high; roof sloping to the north. The windows are intended to admit heat as well as light, or the windows may be omitted, and the front finished in the form of a shed. It will be found very convenient for feeding and watering as well as for gravel, ashes, lime and sand. Boxes may also be placed there for laying and hatching. By partitioning it off, two varieties of fowls may be kept separate, or one side may be appropriate for turkies and guinea-hens, and the other to galinaceous tribe. Doors from each should open into the yard, which should be of considerable size, as room and space in the air is necessary for their health, when they are not permitted the range of the barn-yard. The yard should be a little sloping, that it may be dry, as moisture is a most destructive enemy to poultry. It should be enclosed by a fence at least seven feet high, with long sharp pickets, and the timber on which the pickets are nailed, unless some distance below the top, should be on the outside, to prevent the fowls perching on them, as they seldom fly over a fence without alighting. When first confined they will show some impatience, which soon wears away, if every thing is made agreeable to them.—It may, however, be necessary to clip the wings of some, when first confined, particularly if taken from the barn-yard where they have always had their liberty. My fowls are so attached to the yard that they are unwilling to leave it, even when the gates are open.

The buildings at the ends should be thirteen feet square, and thirteen feet posts. I name this size, as there would be no waste of timber, being just the length of the boards and joists. If not too near the dwelling house, so there would be no danger of fire from spark, I would recommend to have the roof thached with straw, as being much warmer in winter and cooler in summer, and when well done, it forms a light and durable roof, and will last for twenty years. It should, however, be made very sloping, in order to carry off the water more readily. A hole one foot in diameter, with a door hung on hinges at the top, which may be held open by means of a cord, should be made in each apartment, for the fowls to pass in and out, and to confine them when necessary. There should be no floor to prevent the fowls from coming to the earth; and the litter should be often removed, and the bottom sprinkled with lime at least once in each week.

There should be a floor or gallery in the second story, three feet wide on three sides, for the purpose of getting at the nests. The roosts should commence at the top and slope downwards, at an angle of about forty-five degrees, like a ladder, to the floor of the gallery, and immediately over the centre.—In the side where there is no floor in the gallery, is to be a flight of stairs for the accommodation of those who gather the eggs, &c. It is recommended to have the spars or crose pieces for roosting of sassafras, two inches in diameter, with the bark on, which is said to be a protection from vermin. No flying is necessary in this form of a roost, as the birds ascend and descend by steps. The spars should be placed one foot apart horizontally for the hens, and eighteen inches for turkeys, so that they may not incommode one another by their droppings.

I have tried ranges of boxes, like pigeon holes, erected on two sides of the gallery, for nests, but experience, the best teacher, proved to me it was erroneous, especially when hatching for when the setting hen left her nest to procure her food, drink, &c. one of the other hens would espy the eggs and pop in and lay her egg. In the mean time, the other hen would return and find her nest occupied, and finding it no easy matter to eject the intruder, as possession is said to be nine points of law, would seek the first nest she could find with eggs and settle herself there. The consequence was, the other hen, after depositing her egg, would leave the nest, and the eggs would be left to cool and spoil. There is another difficulty; if vermin should make their appearance, there is no way of getting at them or cleaning the nests; to remedy this, I had separate boxes made and hung around the sides and in the corners, which can be removed when hatching, or cleaned and freed from vermin when necessary.

To gratify the hen's organ of secretiveness, the apartments must not be too light, and the access to the nests so constructed that she may steal quietly there unobserved.

Poultry better than Pork or Beef.

In this age of improvement in the production of animal and vegetable food, if there is any good reason why all the science, skill and enterprise of agriculturists, editors, chemists, and philosophers should be applied to the melioration and refinement of one or two classes of animals, to the exclusion of others as good by nature as they are, we should like to know it. The hog and the bullock, dubbed with the English titles of Berkshire and Durham, seem to walk over the land with a sort of John Bull swagger, that has commanded all attention, and left all their brute brethren in their uncultured native deformity; while those foreign *titled* gentry have, in the eyes of some, become absolute perfectionists. Now, in the language of our declaration of rights, "we hold this truth to be self-evident," that (by their constitution) they are all created equal.

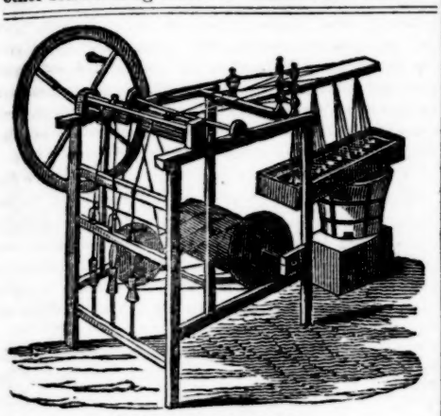
We are aware that the noble Berkshires, by their elaine and stearin, have kindled up a great light in the West, (which we hope may dispel the black cloud of "repudiation" which hovers over that region,) and are about to monopolize all the care and labor of the farmers thereabouts; but we can see no reason why the delicate feathered race should thereby be debarred from sharing in the benefits and perfectionisms of cross-breeding, in-and-in breeding, and all other scientific advancements in the world. The noble and ancient family of Chanticler, whose clarion note has been the world's time-piece ever since Peter denied his Master, and has never failed to sound the approach of every rising sun; the bird that saved old Rome from conflagration by his warning voice in the dead of night—shall these lose their old established rank, and give place in man's affections to herds of swine, and the sturdy bulls of Bashan? What are all *their* uncouth grunts and frightful bellowings about the farmer's cottage, compared with all the music of the cheerful, chirping, chatting cackling, crowing, gobbling, quacking, squeaking, squalling, with which his poultry yard resounds from day to day?

But, to come more to sober matter-of-fact, we think this branch of the farmer's concern is deserving of more attention than it has generally received. The profit derived from a well arranged, well-managed poultry yard, is greater, in proportion to the investment, than that of any other stock, bees excepted. More attention has been devoted to poultry in the vicinity of Phliadelphia, than any other part of our country. The Bucks County poultry have acquired a good degree of celebrity, even in the New York market, where they are sometimes found in abundance. They are, however, but moderate layers; but their eggs are large and well flavored. Yet they are not considered equal to our dung-hill fowls in all respects.

The *Dorking* fowl stands first in the estimation of those who have raised them. They will weigh

from 5 to 8 pounds. Their bodies are large and better proportioned than any others, being long, full, and well-fleshed in the breast. Have short legs, and beautiful plumage, with five instead of four toes —are good layers, good sitters, and good nurses. Their eggs are large, clear, white, and of excellent quality. When caponed, in the English custom, they weigh from ten to twelve pounds. Mr. L. F. Allen of Buffalo, to whom we are indebted for the Dorking history, has them for sale.

Our object in writing this article at this time, is chiefly to suggest to our Agricultural Societies the propriety of offering liberal premiums for the best specimens of the various kinds of poultry, at their next annual fairs. We need say nothing in favor of the richness and delicacy of this luxury of the table. Good premiums will soon bring out new species and valuable improvements in this, as in any other branch of agriculture.—*Conn. Far. Gaz.*



IMPROVED SILK REEL.

We are much obliged to Mr. Irish for this communication, and accord entirely in the conclusions to which he is brought. We hope to hear much more on the subject, and respectfully solicit communications, in detail and in full from all who have made experiments in the silk culture, whether successful or unsuccessful. The causes and occasions of failure, are in most cases, of much more importance to be known, than the circumstances of success.

—

PERRYVILLE, November 8th, 1842.

MR. COLMAN: Sir—It is three years since the culture of silk was commenced in this village, and now be beg leave to lay the result before the public. The first year C. Avery fed a few worms, and became satisfied it was a profitable business. The second year Wm. Doolittle and myself turned our attention to it also, and the present year we have raised as follows, viz:

William Doolittle	75	pounds	cocoons,
Clarke Avery,	56	"	"
David Irish,	50	"	"

Mr. C. Church has fed a few worms, and is about building a cocoonery fifty feet long and eighteen feet wide; and some four or five others in this village and its vicinity, have taken the necessary steps in order to enter into the business next year.

As for myself, I have about one-third of an acre of trees; have raised 50 lbs. cocoons this year, and had foliage sufficient to have raised many more. The work of feeding and reeling was done mostly by a boy about 12 years old; and we expect the silk in the sewing form, the eggs on hand, and all the proceeds, will amount to near $100. We manufacture the raw material into sewing silk, and the floss we card, spin and knit into stockings. It makes excellent stockings. Our silk has the preference in this county. It is equal to the best produced at Auburn, and we are informed, will suffer nothing by comparison with any silk raised and manufactured in this State. Actual experiment has brought us to the conclusion—

1st, That though the silk business is attended with some difficulties, yet they are far more easily overcome than one unacquainted with it would imagine:

2d, That it is a profitable investment of capital, being as certain, and yielding as large a profit as any other department of industry:

3d, That it turns to a good account the labor of children which would otherwise be nearly or quite profitless:

4th, That it opens such a field for female industry as will contribute largely to their comfort and exaltation:

5th, That silk will ere long become one of the great staple productions of our country, and its cultivation a vast source of wealth and independence.

At the commencement of our operations, we were deemed visionary speculators, but our experiment, brief and limited as it has been, has silenced skepticism and convinced the majority here that raising silk is profitable and practicable.

N. B.—We have trees, and eggs, and all the information necessary for any who may wish to engage in the silk business. Communications may be addsessed to C. Avery, Wm. Doolittle, D. Irish, or Charles Church, Perryville, Madison County, N. Y.

Respectfully, &c., DAVID IRISH.

P. S.—I have a few eggs of the Mammoth Sulphur worm, but different from the common kind of that name, that made cocoons this year, that reeled twenty-eight ounces to the bushel, whereas the celebrated Pea-nut kind made cocoons that reeled only twenty-two ounces to the bushel. But I have but a few eggs of this kind that I would part with this year. D. I.

EXPERIMENTS IN RAISING SILK.

Brockport, February 24, 1843.

MR. HENRY COLMAN:

Dear Sir:—You was pleased to invite me, at the agricultural meeting last week, to write some account of my silk operations.

If I could in any way be instrumental in promoting the successful culture of silk in our country, my services would be most cheerfully rendered; and it is under the impression that an honest detail of facts from practical operators in this business may further this object, that I have concluded to attempt a compliance with your request.

I am more immediately stimulated to this undertaking by considerations growing out of your contemplated Agricultural Tour to Europe. It seems important that on leaving your own country, you should be in possession of all the information which our experience affords, in reference to the production of silk, that you may be prepared, on arriving in the silk countries on the continent of Europe, to direct your attention more especially to the means and methods required to remove the obstacles and embarrassments under which the enterprise is laboring in our own country.

I have myself suffered most in the prosecution of the silk business, for want of precisely that kind of information which it is most difficult to get at—the cases of failure and the causes which led to them.

Unaccustomed to write for publication, I shall adopt as brief a method of communication as is consistent with the end proposed. It will be sufficient for my present purpose to go no further back than the season of 1840, which will include the family of worms upon which I have placed my main dependence.

EXTRACT FROM MY JOURNAL.

"June 29, 1840.—Received from G. B. Smith, of Baltimore, 1-4th ounce of silk worm eggs, (price $5; or $20 per ounce) mailed 24th inst. On opening the letter today at noon, 3 or 4 eggs had apparently just hatched—now, 9 o'clock, P. M., some forty or fifty young worms are out."

Those eggs were, as Mr. Smith informed me, from the stock of Doctor Bell, of Maryland, and were of the Nankin Pea Nut variety.

I left home about the first of July, and put the worms in charge of a careful man in my employment. On my return in August, I made the following entry, viz:

"August.—The above worms were fed in their first stages, upon multicaulis, and carried through upon the leaves of the white mulberry; produced fine cocoons, weighing about 14 lbs to the bushel."

Journal again:—"May 29, 1841.—The Pea Nut eggs saved last season, have been carelessly kept. They were put in the front (north) hall in September last, and remained there in stone jars until April, when they were removed to my cellar. The estimated quantity was 250,000 eggs."

My plantation being ample for the supply of a large establishment, my attention was directed through the whole season of 1840, to observing the progress of the business at home and abroad, having made a journey of some 6 weeks to the east and south for this purpose. The result was, a conclusion that in the then state of information in regard to raising the silk worm, it would be a hazardous experiment to make any further investment in the business.

This determination was altered by the following circumstances: Upon some paper boxes and other loose materials which had been removed from the room where the Maryland Pea Nut worms had been reared, there was a small quantity of eggs deposited. These had been removed in the fall to my store loft, where they remained until the last of May, 1841, when I accidentally observed them hatching upon the outside of the boxes.

In my tour of 1840, I had visited the cocoonery of Edmund Morris, Esq., of Burlington, N. J., and was made acquainted by him with the principles upon which he proposed to construct his newly invented feeding frames. His plan appeared practicable, and having watched its progress and been strengthened in my confidence in its superior merits, by the evidence furnished from various experiments made with them at the South that season, I concluded to rear these young worms which had been thus prematurely thrown in my way, and with them test the value of Morris' feeding frames.

A person had applied to me who had had some experience with the worm, for the privilege of using my mulberry leaves on shares; to whose care I immediately consigned the worms and furnished the above frames to rear them upon. The result was highly satisfactory; from what we estimated at about 6,000 worms, we obtained two bushels very fine cocoons weighing 14 lbs. to the bushel.

Very few of the worms were diseased, and the display of the rich straw colored cocoons, intermingled with the straw, exceeded any thing of the kind which I had witnessed. There appeared to be no longer any reasonable ground for hesitation, and I immediately set about preparing a cocoonery, which had been erected and enclosed the previous season, near the mulberry plantation, and designed for a hay barn or cocoonery, as circumstances might require. This building was 42 by 22 and two stories high. It was well fitted up and furnished with the feeding frames in due season, for the reception of the young worms, which were hatched in successive lots, to economize time, space, labor and food.

The first lot of about 20,000 exposed for hatching 27th May. All for a while went on well. Several hundred thousand worms were subsequently added to the stock from various sources, and all put in one apartment. I find it necessary here to allude to another family of Pea Nut worms which were fed in the same rooms with the Maryland Pea Nuts, from which I had saved 45,000 eggs. From these were selected the 20,000 first hatched as above mentioned, and this variety we had found more liable to disease than the other.

Journal—"June 5, 1840.—Received from Mrs. Carter, of East Bloomfield, per mail, a few hundred eggs of the white Pea Nut variety. Reared in the same room and at the same time with the Nankins—the only difference noted in the lots in 1840, was in the color and disease. The first remark I find indicating danger, is under date of July 22d.

Journal—"July 22, 1841.—Excessive heat—mercury in cocoonery 76 to 90 degrees and upwards; white Pea Nut worms now spinning—becoming silky—used lime more freely, also vinegar and water—too much confusion and irregularity, and litter allowed to accumulate.

"24th—Disease much increased—directed more vigilance and had many of the worms changed to other frames.

"27th—Growing worse—directed that the frames containing diseased worms should be cleansed with brimstone."

Trouble increased until August 14, when I made a more thorough personal examination of the whole establishment; found the different broods of worms had been permitted to ramble from one frame to another, and that all ages and varieties were mixed and mingled together in promiscuous confusion. Still, the superintendent said there was no want of help. I however procured an additional supply, and having prepared clean sets of frames and fresh straw, supplied each attendant with a pint basin, on the bottom of which leaves were strewed, and directed them to select ten of the largest worms and deposite them upon frame No. 1, until it contained 1,000. (The frames were 4 feet square, and the first selection embraced worms in the 4th and last stages.) This system was pursued until all the worms in the cocoonery (which probably yet amounted to several hun-

dred thousand) were classified and arranged, and the masses of mouldy and putrifying litter, and diseased and dead worms were removed.

Journal—"August 16th.—The worms selected on the 14th appear in good condition and doing well. Lot No. 1 of those then selected beginning to spin; the largest proportion of the worms, however, were then in 3d and 4th stages." My attention was necessarily diverted from the cocoonery through the remaining part of the season, so that I was only there occasionally, and not fully prepared for the fatal issue of my experiment. On the 28th I addressed a communication on the subject to Mr. Bateham, to which I beg leave to refer you (in September No. of the Farmer for 1841) as illustrative of the condition of my whole establishment, and of the views which I then entertained. In that communication is an error in printing; "room" being used instead of worm, in reference to Morris' feeding frames.

I was then apparently in the full tide of successful experiment, and many experienced persons who visited the establishment, expressed full confidence in the favorable result of my exertions. The favorable appearances last noticed, were deceptive; as the worms advanced to maturity, disease was developed, and they perished in large numbers daily; and to add to my disappointment, they were attacked by mice, which probably destroyed many thousands. The whole amount of cocoons obtained from the cocoonery that season was about 67 pounds; say 6 bushels. One more item will complete the history of that season.

To carry out the experiment of the season by trying a late crop, I had ordered from E. Morris, of Burlington, N. J., 6 ounces large Sulphur variety of eggs. These did not arrive until the 17th of August.

Journal—"August 17.—Received a package of cotton cloth per mail, upon which were profusely deposited eggs of the silk worm—whole weight of package 12 ounces—paid postage $9 00."

These were duly hatched and attended, but too late for the season, their progress was slow. Before they arrived at maturity, the weather became so unfavorable that I gave them to the hogs. $500 would have been no equivalent for my sacrifices in the silk business in 1841. The causes to which I attributed my failure, I find detailed in my journal, but due forbearance towards others seems to forbid its publication here.

In this connection I will notice a case which I witnessed at the cocoonery of John Mason, jr. Esq., on the 17th July, 1840, in Georgetown, D. C. I found the persons engaged in the cocoonery shoveling out bushels of full grown worms in the most offensive state of putrefaction. As my attention was accidentally directed to Capt. Mason's cocoonery by a gentleman in whose company I rode over from Washington that morning, I entered the cocoonery without ceremony and applied to the person who appeared first among the attendants, for explanation. This person I soon discovered, was Mrs. Mason herself. The information which I obtained from her led to the following entry in my journal at the time:

"Capt. John Mason's Cocoonery, Georgetown, D. C., July 17, 1840.—Lost proceeds of 16 ounces eggs in the last stage, by the disease called yellows. Hardy Greys, small; saw some fine specimens of Pea Nut cocoons in the cocoonery; understood the eggs of diseased worms were imported from France; obtained no satisfactory account of its cause." Every thing about this establishment seemed almost a guaranty of success. The cocoonery was situated upon an eminence, fitted and furnished in an appropriate manner, and surrounded by a luxuriant growth of foliage, well calculated to shield it from the excessive heat of the sun, and to cool and purify the atmosphere within and about the premises. The mansion and adjacent accompaniments, indicated abundance. In the dwelling house I was shown a reel rendered ornamental by its superior finish, and which I understood had also been imported from France; all showing that no expense had been spared to insure the most favorable result. The accomplished lady of the house, too, who seemed to be endowed with every necessary qualification, had by her personal attention to the affairs of the cocoonery, and her intelligent communication in regard to its various operations, satisfied me that there was no lack of efficient superintendence. I also learned from a gentleman whom I saw at the cocoonery, that there were several other like cases of failure in that vicinity, I know nothing of their subsequent operations, and have taken the liberty to introduce this notice here, with a hope that it may lead to further developements in aid of the cause.

Last season I leased my whole establishment to men who had had successful experience in the business, particularly the previous year, with the use of Morris' frames. I think a detail of their proceedings would throw no light upon the subject and therefore omit it, at least for the present. The result was as follows:

1st crop Nankin Pea Nut cocoons, gathered early in August, and weighed on the 6th,	220 1-4 lbs.
2d crop Nankin Pea Nut cocoons, which should have been much larger, weighed on the 25th,	25 "
3d crop Nankin Pea Nut cocoons, which should have been much larger, weighed Sept. 25,	1 1-4 "
Whole proceeds of the establishment, containing stock and conveniences for feeding one million worms,	246 1-2 "

This result was caused by disease among the worms. Among the several efforts made in this vicinity to raise silk last season, I will now only refer to one, which in its result exhibits a strong contrast to my own operations, and will serve to illustrate some of the positions which I have assumed for the regulation of future experiments.

Mr. Heman How reared a lot of worms in the loft of his own dwelling, from which he obtained about eight bushels cocoons, weighing over 14 lbs per bushel. The stock from which these worms originated, was the Nankin Pea Nuts. I gave Mr. How a few of the eggs from that variety in the spring of 1840. The worms reared from those were considerably diseased that season, and his crop of 1841 still more so. But that of 1842, from which the eight bushels of cocoons were obtained, were very little affected. He immediately sold his cocoons for $1 per bushel, and, together with the State bounty, obtained something over $50 from this small domestic opration. His worms were fed for the first few weeks upon multicaulis, and carried through with the leaves of the white mulberry, mostly obtained from a distance of three miles.

My attention has been more or less directed to the culture of the mulberry and the rearing of the silk worm, since the autumn of 1832, when I purchased from Thorburns, in N. York, a few plants of the morus multicaulis. In all my experiments with this and the Morus Alba, I have been uniformly successful, and do not hesitate to say, as I am prepared to demonstrate, that there is not a farm in the county of Monroe, upon many parts of which both kinds may not be grown with as little difficulty as the peach tree.

The only difficulty then, is with the worm; as I take it for granted, that when (to speak within perfectly safe limits) cocoons will readily sell for $3 to $4 or $5 per bushel, and when if disease can be avoided, with, at least, as much certainty as with any of our domestic animals, the cost of producing them need not exceed $2 per bushel. The whole matter may be reduced to depend upon its prevention.

As a sure basis for future operations in the culture of silk, therefore, I propose the following propositions with regard to the diseases of the silk worm, viz:

1st, That the disease is hereditary.

2d, That it is contagious, but may be avoided by due precautions, if one crop only are fed in a room in one season.

3d, That consequently it is unsafe to feed more than one brood of worms, inheriting disease, in one apartment during one season; and as all experience has shown, that under ordinary circumstances, there is little danger attending the first or earliest crop of worms, it is best to commence as early as the season will warrant.

4th, That the seed worms should be reared in buildings separate from those intended for cocoons.

5th, That absolute exemption from disease, requires that the eggs should be obtained from stocks in which disease does not exist by inheritance.

6th, That in all cases where apartments are intended to be used in which disease has appeared, they should be thoroughly disinfected.

With a due observance of the precautions above indicated, and the application of ordinary skill, attention, industry, and prudence, I cannot doubt but the culture of silk may be regarded as an equally safe, and much more profitable undertaking, than any other branch of agriculture; and that it is peculiarly adapted at this time, to release us from the depression under which almost every other branch labors.

The law offering a bounty upon cocoons and reeled silk, affords great encouragement to the undertaking. I am satisfied that where the business is prudently managed, it will pay all the current expenses. In my opinion it would be more efficient in promoting the object intended, if for a few years the greatest proportion of it had been appropriated to the culture of the mulberry. Neither our forests nor orchards afford food for silk worms, and it strikes me that our Legislature might with almost as much propriety, offer a bounty on wine for five years, to be produced from vines raised within that period, as upon cocoons and silk for a like period.

Many individuals in our country, besides the mere multicaulis speculators, have suffered great losses in experimenting in the silk business, and have abandoned it either from necessity, or as a hopeless and thankless undertaking; when a little legislative encouragement would have enabled them to persevere until almost every farm would have been supplied with this invaluable tree, the due appropriation of which would render available the time and efforts of those members of the family now nearly sacrificed to the idle and extravagant customs of this age of improvement.

If the principles above proposed, in reference to the diseases of the worm be correct, a firm conviction of the necessity of their adoption three years ago, would probably have made a difference of some thousand dollars in my own case, besides great personal sacrifices not to be estimated by dollars and cents: and if this is true in my case, it applies with equal force to many others throughout the whole extent of our country.

I submit the matter of giving this communication to the public to your discretion. I should be glad to see these positions criticised, and am willing to abide the issue, as my object is the establishment of some settled system in the place of uncertain and never-ending theories.

Allow me to say a few words in reference to your contemplated Tour to Europe, and to say what I would like to know in relation to the history of silk culture there for a period of say three years, including the time of your residence there:

1st, The comparative annual extent of its culture during that period.

2d, The comparative annual extent of disease during that period.

3d, The average comparative number of worms reared and quantity of silk produced in the large establishments during that period.

4th, The comparative annual number of those establishments within a district of country equivalent to the county of Monroe.

5th, The same inquiries with regard to cocoons produced in a domestic way within a distance of 6 miles square.

6th, The comparative annual expense of labor employed in the large establishments within the above period.

7th, Whether any such thing is known as a perfect exemption from disease in the large establishments for the above period.

8th, What remedial and disinfecting agents are most relied on.

9th, Comparative temperature and humidity of the atmosphere with our own.

10th, Whether the agency of electricity and magnetism is rendered available in the education, as the French have it, of the worm.

With regard to the reeling and subsequent manufacture of the fibre, I apprehend no difficulty. Yankee ingenuity and perseverence have already accomplished much, and in this as in all other branches of manufacture, will not fail in due time to be able to compete with the civilized world.

Your obedient servant,

GEO. ALLEN.

Silk Growing.

The following letter is from one of the most enlightened and best friends of agriculture in Massachusetts. To some old rats who have been in the trap, and perhaps have lost a tail or a leg, it may scent rather strongly of the multicaulis; but they may be assured that the approach is perfectly safe, and our good friend needs no guaranty for his truth and

honor. We hope the friends of agriculture will encourage the proposed publication, for which we put ourselves down for fifty copies; but we can promise no more permanent aid, as we are on the very eve of embarking for a voyage of discovery. We do not say that we shall not penetrate the Celestial Empire itself, before our return, and see the Chinamen at their own cocooneries and looms. Heaven sends no evil unmixed; and the dreadful opium war, now happily concluded, (for a conclusion to bloodshed and outrage, and all the pourings out of human anguish involved in it, must always be hailed with joy,) may yet open to us treasures of agricultural knowledge and practice, of the greatest value; for certain it seems to be, that no nation has as yet ever carried the art of cultivation to a higher degree of perfection than these semi-barbarians, as we fighting, tobacco-chewing, and opium-selling Christians choose to call them.

Our excellent friend encourages us with the hope of greeting him in a complete suit of silk of his own product and manufacture. May it be our felicity so to do; and we promise to make as many salams, when so we meet him, as we would before the highest mandarin of the Chinese Empire, or even his Imperial Majesty himself. He has long looked at the promised land from Mount Pisgah; and now there is every chance of his entering it; for the silk culture must succeed.

NORTHAMPTON, *Mass., Feb.* 10, 1843.

H. COLMAN, ESQ.,—Dear Sir: You have been furnished with a copy of the Report of the New-England Silk Growers, since which a second edition has been called for, printed, and distributed to the subscribers, at $1 50 per hundred copies; and now there is prospect of a farther supply being called for. Worcester Agricultural Society, believing that the circulation of the report would promote the interests of agriculture, have ordered copies to the value of ten dollars, to be distributed in the county of Worcester.

The first and second edition consisted of 20 pages, at $1 50 per hundred copies. If another edition should be printed, it will be enlarged with matter interesting to silk growers, to 24 pages, at two dollars per hundred copies. Should there not be encouragement for an enlarged edition, an appendix to the second edition will be printed separate.

The time is apparently approaching when silk may become of great use to the country, and to hasten that event, it seems necessary to show the people that it is incumbent on agriculturists to do all they can towards saving a vast amount of money annually sent abroad to support foreign enterprise and industry.

Silk will be found more of a cash article than many other crops; the market cannot be overstocked, or rivalship in the trade, unless it be who shall raise the most, and do the most towards diminishing the amount imported.

Every farmer may have his mulberry patch. His children, the infirm and the aged may do the work, (without interfering with the usual requirements of the farm operations) and raise enough silk, at least, to make the family sewings; and as soon as practical knowledge and skill are acquired, may then raise for market.

There have been recent discoveries and improvements suggested, of essential advantage to the silk-grower, not only to simplify the process of feeding, but to make useful the after foliage (when the worms have done feeding) for making paper, and using the perforated cocoons, floss, and waste, for making good silk. These have been considered of little or no value, but are hereafter to be worked to advantage.

I have samples of American paper, made from the foliage of the multicaulis; also of letter, cap, newspaper, book, printing, lithograph, &c., of Chinese manufacture, from the Canton foliage, of course, (as the multicaulis is not used in China.) When Dr. Parker and his Chinese attendant visited me, I showed them our varieties of foliage; the Canton was readily recognized, and on showing the multicaulis, the China man said, "*too much big.*" To the question were worms ever sickly, he applied his fan over my desk to indicate open feeding or ventilation.

I have samples of excellent silk, spun from perforated cocoons, by the most simple domestic machinery, (the foot-wheel) also floss and waste of vesting prepared for spinning. A lad, who perhaps had never seen a foot-wheel until within a few weeks, has commenced operations and turns off daily, half a pound of silk; and with more experience, may spin a pound in a day. This silk is suitable for sewing or weaving; and when you return from your contemplated tour, you may see me with a *field dress* of this kind, without coloring, superintending the feeding operations, preparing to furnish the Eastern Continent with American silk.

I have alluded to simplifying the feeding process; the worm has, undoubtedly, been too tenderly nursed, and probably sickness has been occasioned by too close confinement; and if the worms should be accustomed to the variations and vicissitudes of the weather, would be more healthy: of this there is ample evidence. In China, the worm was anciently bred in the open air; the worm grows and comes to maturity in so short a time of such a size, that its body must perspire very freely, and requires a free circulation of air on all sides.

I have evidence that sickly worms having been thrown away and exposed to pelting storms several days in succession, have been taken in whole and sound, and wound better cocoons than even those called the most healthy.

I have a letter under date of January 11, 1842, to illustrate open feeding, from an eminent silk-grower in Kentucky. H. P. Byram, Esq., says that open shed feeding will be adopted in that quarter; that Dr. Stuart by accident, or rather by neglect, last season fed his worms in this way; although the weather was cold and the rain completely drenched them, yet they made the best and largest cocoons that he ever fed; and is about putting up a long building in the same way for open and exposed feeding; that Dr. Stuart used whole trees, and let the worms form their cocoons in the branches after they had eaten off the leaves. Mr. Byram dont quite like it, altho' he approves of shed feeding—that something is wanted to bring up the worm against, (say an over-shelf) and thinks that nothing accomplishes this like a frame of his invention, combining the ladder, yet he thinks he shall adopt the open shed feeding.

Your friend, J. R. Barbour, is anxious to send forth the third edition, with recent discoveries, &c. Should any of the Agricultural Societies or others, wish to secure any, they can be had by leaving early notice, at $2 per 100 copies. They will be printed here at cost; cheaper than the Societies' tracts.

I have been favored with your several Agricultural Reports, except the 3d Mass. Report, containing your remarks on silk. I have sent to the Secretary's office, but find none on hand. I should like to secure one; can you inform me where I can probably find the Third Report? One object is to preserve every thing relating to the silk culture, to be examined by those who may come after us, and have a curiosity to see our early doings, and perhaps laugh at our deficiencies.

Should you have a desire to see some American paper made from mulberry leaf, Gideon B. Smith, of Baltimore, can procure some made at Petersburgh, Va., by Dr. Spencer.

Respecting open feeding, Dr. Seeger, a German physician, now of this town, but formerly resided in Charleston, S. C., tells me that riding a few miles out of the city in a clump of trees, he saw one covered with cocoons; (not having ever seen one before) he supposed it was some fruit of the tree, but afterwards found them to be cocoons of the silk worm; he will write the facts for me. Mansfield feeders say that worms suffer more from heat than cold. We hope to show up that the one crop system and open feeding is the right course for success.

Respectfully yours,

D. STEBBINS.

Improvement in Wheat.

The name of Gen, HARMON, of Wheatland, Monroe co., promises to become as honorably connected with the improvement of the great staple article of food in this country, wheat, as has that of Le Couteur with the progress of wheat culture in England. The business could not have fallen into better hands. Possessed of ample means, his soils admirably adapted to wheat, and in the very centre of the best wheat district of the states, with a fund of information on the subject, gained from experience and from books, and with a patience and perseverance which enables him to pursue any course of inquiry to its final result, General Harmon is the man to enter upon and carry out such improvements in the culture of wheat, as circumstances may suggest.

General Harmon's principal crop is of the variety he calls the Improved Flint, which had its origin in the common *white flint* wheat, introduced into Western New-York not far from 1820. This wheat is so well known as to need no description. It is hardy, not very liable to rust, never shells in gathering, and weighs well. The most serious objection formerly made to this wheat was the difficulty of thrashing it by hand, a difficulty done away by the introduction of the threshing machine. On favorable soils its yield is from 20 to 25 bushels per acre. By careful cultivation and selection, and not allowing any other kinds to come in contact with this wheat, either in the field or in the granery, Gen. Harmon has brought the *Improved Flint* to a purity and uniformity of quality, we have never seen equaled. This wheat is much sought after for seed, and much the greater portion of his crop is always used for this purpose. The advance he makes on the price, over ordinary wheats, is a reasonable, not extravagant one, and his sales are consequently extensive. We had the pleasure of seeing at the house of a farming friend of ours in Onondaga co. last fall, 20 barrels of this wheat he had just procured for seed, and a beautiful sample it was, as all who have examined the specimens produced by General Harmon at the State Agricultural Fairs will readily believe.

Gen. Harmon is experimenting with a variety of other wheats, some of which have been lately introduced into this country from abroad, and others are kinds which have long been known to our wheat growers. Among these are our Kentucky white bearded, more commonly known as the Canada Flint, a valuable wheat, the berry plump, white and heavy; the old Genesee Red Chaff, grown since the first settlement of the country, and were it not for its liability to rust and blight, would be one of the best wheats in the State. Some of the heaviest crops of wheat ever grown in the United States, were of this variety; 40 acres of it have been known to average more than 60 bushels to the acre. The Wheatland Red wheat is a variety originated by Gen. Harmon, and promises to be a valuable sort, ripening early, and producing a fine berry. He also cultivates the Virginia May, long a great favorite in the south; the Talavera Wheat from England; the English Flint, much resembling the old Genesee Red Wheat; with other varieties not necessary to enumerate.

In sowing wheat, Gen Harmon pursues the course long since recommended in the Genesee Farmer and in the Cultivator, of thoroughly washing in brine, and drying with a quart of quick lime to a bushel of the seed. We have never known a crop of wheat damaged by smut where this method was faithfully practiced, and very few escape without some smut, where it is not. We can recommend from our own experience, the benefits of a change of seed, and with us that change has been most beneficial when the seed has been brought from oak lands, and which contain less vegetable matter than is usually found on those of beech or maple. Gen. Harmon prefers cutting wheat as soon as it is well out of the milk, or when the berry will yield to the pressure of the thumb and finger easily. His experience in this respect, agrees with that of our English correspondent, Mr. Hannam. The almost perfect exemption of Gen. Harmon's crops from cockle, chess, &c., is doubtless one great reason why his wheats are so much prized for seed. By perseverance he has eradicated all such matters from his soils, and as in his hands wheat never turns to chess, &c., his crops are consequently clean. In this respect, as well as in the care and success with which he produces wheat, he has set an excellent example to American farmers, and for his labors he deserves and will doubtless receive an ample reward.—*Cultivator.*

☞ The above mentioned White Flint Wheat, raised by Gen. HARMON especially for seed, may be had at the Rochester Seed Store.

TO WASH WOOLEN GOODS.—The art of washing woolen goods so as to prevent them from shrinking, is one of the desideratum in domestic economy worthy of being recorded, and it is therefore with satisfaction we explain this simple process to our readers. All descriptions of woolen goods should be washed in very hot water with soap, and as soon as the article is cleansed, immerse it in cold water; let it then be wrung and hung up to dry.—*Southern Planter.*

Ontario Agricultural Society.

PREMIUMS AWARDED BY THE ONTARIO AGRICULTURAL SOCIETY, FEBRUARY 14, 1843.

For the best ox fatted for slaughter, $7, was paid to Wm. W. Gorham, of Canandaigua.

2d best do. do. $5 was paid to Samuel Greenleaf. of Canandaigua.

3d best do. do. $3 was paid to Elias Durand, of Canandaigua.

For the best cow, fatted for slaughter, $5 was paid to Philo Hamlin, East Bloomfield.

2d best do. do. $3 was paid to James Robison, of Gorham.

3d best do. do. $2 was paid to Elias Durand, of Canandaigua.

For the best steer under 4 years old, fatted for slaughter, $5 was paid to Myron Adams, of East Bloomfield.

2d best do. do. $3 was paid to John McConnell, of Canandaigua.

For the best 6 sheep, fatted for slaughter, $5 was paid to Geo. Cayward, of Seneca.

For the best field of Indian corn, of not less than one acre, $7 was paid to Bani Bradley, of E. Bloomfield. [84 bushels to the acre.]

2d best do. do. $5 was paid to Royal A. Andrews, of Bristol. [66 bush. to the acre, 1st qual.]

3d best do. do. $3 was paid to Chas. B. Meeks, of Canandaigua. [66 bushels to the acre.]

For the best field of Barley, of not less than one acre, $5 was paid to Elijah Jones, of Bristol. [50 bush.]

For the greatest quantity of red clover seed, of good quality, $5 was paid to Andrew M. Bush, of Hopewell. [over 150 bushels.]

Roots.

For the best field of Potatoes, not less than 1-2 acre, (nor less than 400 bushels to the acre) $5 was paid to Henry Howard, of Canandaigua. [468 bushels to the acre.]

2d best do. do. $3 was paid to Bani Bradley, of East Bloomfield. [403 bushels to the acre.]

For the best field of Mangel Wurtzel, of not less than 1-4 acre, $5 was paid to Charles B. Meeks, of Canandaigua, who raised at the rate of 17 tons, 10 cwt. 42 lbs. per acre.

On articles of wheat, ruta baga and sugar beet, premiums were withheld for the reason of the competitors not having complied with the regulations of the Society, with regard to the measurement of fields, statement of mode of treatment, &c.

Mr. Benj. E. Bicknell presented a statement of Sugar Beet from 1-4 of an acre of 247 bushels and 7 pounds.

—

These crops speak well for the excellent farmers of Ontario county. We should have been very glad if the number of competitors had been mentioned under each head. In general, there are much fewer than is desired. There are few, if any, parts of the state containing more agricultural intelligence and practical skill in husbandry, than the county of Ontario; and no part presenting a fairer field for their action.

Livingston County Agricultural Society.

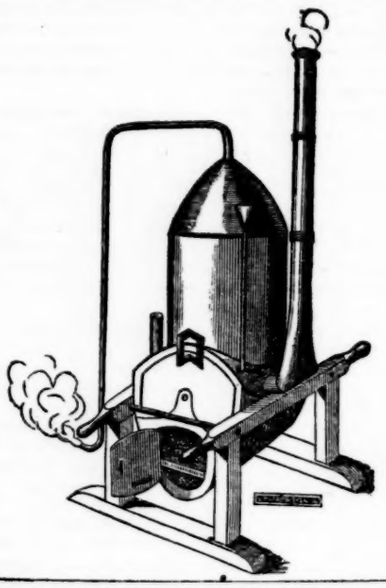
The following are the officers of the Livingston County Agricultural Society for the present year:

HOLLOWAY LONG, of York, President,
C. H. BRYAN, of Geneseo,
D. H. FITZHUGH, of Groveland,
T. H. NEWBOLD, of Caledonia, } V. Pres'ts.
W. W. WADSWORTH, Cor. and Rec. Sec'y.
ALLEN AYRAULT, Treasurer.

MANAGERS.

James S. Wadsworth,	Genesco,
Eli Root,	York,
W. W. Wooster,	Leicester,
Wm. A. Mills, Jr.,	Mt. Morris,
Charles Shepard,	Sparta,
Hector Hitchcock,	Conesus,
Leman Gibbs,	Livonia,
Asahel W. Warner,	Lima,
Samuel Vance,	Groveland,
Ira Merrill,	Avon,
James McNaughton,	Caledonia,
Harvey S. Tyler,	Springwater.

Love labor: if you do not want it for food you may for physic.



MONROE COUNTY PREMIUM STEAM GENERATOR.

LETTERS Patent having been obtained on this Machine, it is now submitted to the examination of farmers, manufacturers, and mechanics, as an invention of great utility, for Steaming Roots and Provender for Stock, for Heating Water and all other Liquids, for Culinary and other purposes. The following are some of the advantages secured by this Machine:

1. It is portable, and so constructed as to be easily taken apart for cleaning and repairing.

2. It saves, compared with the ordinary modes of heating water, at least 14-15 of the fuel.

3. It will boil a barrel of water in twenty minutes, with six pounds of wood.

4. It is applicable to Steaming all kinds of Feed for Farm Stock, for Heating Water for Domestic Purposes, for Boiling Sugar; and is useful to Hatters, Dyers, Glue Makers, Morocco Dressers, &c.

The following gentlemen, having seen it in operation, thus speak of its utility. The first certificate is from H. Colman, Editor of the New Genesee Farmer, and C. F. Crosman, Proprietor of the Rochester Seed Store, known to the farmers of Western New-York, and acquainted with their wants. The second from the Report of a Committee of the Monroe County Agricultural Society, who are practical farmers.

"Having seen this Machine in operation, as far as our observation goes we commend it to the use of farmers, who have occasion to heat considerable quantities of water, or to cook food for stock. It is effectual; requires little time in heating or boiling; produces steam rapidly and abundantly; consumes very little fuel; and is portable and not expensive. Its durability much depends on the manner in and the material from which it is made. Our opinion is, that in the end, copper will be found preferable to tin.

HENRY COLMAN,
Rochester, Feb. 21, 1843. C. F. CROSMAN."

"Stephen Atwater, of Rochester, exhibited an ingenious Portable Steam Generator, a new invention of his own, that promises to be of great service to farmers. With six pounds of wood it will cause a barrel of water to boil in twenty minutes. We award the inventor a premium of $6.

ALEX. KELSEY,
W. C. CONELL,
N. HAYWARD."

☞ This Machine is manufactured by T. M. & J. W. WARRANT, No. 13 South St. Paul-street, and H. MARTIN, 73 Exchange-st., Rochester; where those wishing to procure single Machines and county or state rights, can obtain them.

For the New Genesee Farmer.

Description of the Stone Barn of the United Society at Harvard, Massachusetts.

This barn is 84 feet long and 44 feet wide; the walls are 23 feet high and 2 feet thick at the bottom, and 1 foot 6 inches at the top. The stones of which the barn is composed, were those gathered up in our fields, (except corners and sides of windows) which were roughly faced with a stone hammer and then conveyed in wheel-barrows on to the work. The quantity of lime used was from 18 to 20 hogsheads, containing about 11 bushels each. The shingles we used were prepared by dipping them into a composition consisting of three parts tar and one of pitch, boiling hot; then they were taken out and struck into hot sand, which formed a solid coat of tar and sand on the outside of the shingles; and should they continue to wear as well as they have done since put on, we have no doubt but they will last a century or longer.

The quantity of timber used in this barn is the same as one built wholly of wood, except the outside which the walls supply. There is an arch through the centre of the barn cross-ways on the lower story, into which the principal part of the manure is thrown, which secures it completely from the drenching rains. The barn will hold from 20 to 40 head of cattle, and hay sufficient to keep them. The great floor runs through the barn lengthwise, and is 14 feet from the lower floor and 7 feet from the scaffold, which consists of a tight floor over the whole of the first story, upon which the hay is thrown down on both sides of the great floor, and we find that the work is not only quicker done but more easily performed.

Fears have been entertained by many that the hay which lay near the walls of the barn would be liable to gather moisture and receive essential injury, but we find from three to four years trial, that these fears are wholly groundless, as the hay keeps as well near the walls as elsewhere.

The whole cost of the barn, as near as we can calculate, amounts to about two thousand five hundred dollars.

SWINE.

Having seen several statements in various periodicals, concerning keeping swine on apples instead of potatoes, we have been induced to make the experiment. Our swine have been kept the last winter entirely on apples, except the refuse from the kitchen, and we think they look as well as they have years past fed on potatoes. We purchased the apples, which we chiefly used, from 5 to 8 cents per bushel; which makes it come far cheaper than potatoes, although it required about one-third more of the former than of the latter. The apples were given to them without being boiled or steamed.

The swine that we fatted last fall, were fed on a mixture, consisting of apples, potatoes, and meal, of equal parts; the two first being boiled together and the meal added while they were in a boiling state, and thoroughly mixed together and given to them cool. This mixture they consumed greedily, and fatted fast until the time they were butchered.

UNITED SOCIETY SHAKERS.

The subjoined is full of encouragement for the enterprising, industrious, and persevering:

Actual Improvement.

MR. COLMAN—Dear Sir: In the summer of 1834, I traveled through Cattaraugus and the southern part of Genesee counties, and was much surprised at the barren appearance of the country and the poverty of most of its occupants. It is tight-bottomed land, or what is better known as hard-pan, the sub-soil being so tenacious that the water cannot pass through it. The surface was very uneven, caused by the turning up of the trees by the wind, and the holes thus made filled with water in winter which remained until dried away with the summer's heat, so that the soil was wet, cold and sour, and the crops generally light and destitute of nutriment, owing to the superabundance of moisture on the surface. The pastures and meadows were spotted with bull-rushes and coarse grass, unfit for any animal food. Their cattle and sheep, in general, very inferior and very poor in spring; many of them annually dying of poverty. And in wintering their calves and lambs, they considered it doing well if they got one-third or even one half of them alive through the winter. Fences were poor, barns small, and the farms, generally, were destitute of any shelter for their animals.

Being acquainted with the occupants of a well-known farm called Barber Hill, I called and was told that they could not live on their farm, for it would not produce them the comforts of life. Grain would not grow, and they could not live on grass; and that clear out they must and would the first opportunity; and from the appearance of all around I could not blame them.

This season I again visited the Hill, and was astonished at the unaccountable change that had taken place. The fences were good; out-buildings as shelter for cattle, sheep and swine, had been erected; the surface of the ground was made smooth, and was covered with a luxuriant growth of grass and grain; the bull-rushes and coarse grasses had disappeared, and an abundant growth of clover and timothy had taken their place, and every thing around plainly told that plenty for both man and beast had driven poverty and want from the hill. On inquiry, I ascertained that my old acquaintance had sold out and gone to the happy West, and that the present occupant, Mr. Beck, had produced these wonderful changes in the short space of five years. Wishing to ascertain how such valuable improvements could be made in so short a time, I made an excuse for staying over night, and received a friendly welcome from Mr. Beck and family. On the next day I examined carefully the whole premises, and was thoroughly convinced of the beneficial results of improved husbandry.

Mr. B. is an intelligent Scotchman, who brought with him the industry and skill of an old country farmer, and will prove a valuable acquisition to Western NewYork, at least to the hard-pan land farmers. His fields are plowed in ridges of 15 feet wide, elevated a little in the middle, and an open furrow between each ridge to allow the water to pass freely off; and at the bottom and top of each field there is made an open ditch which receives the water from these furrows, and thus the surface is freed from the surplus water, and where there are any springs or wet places, they are made dry by covered drains which do not interfere with the cultivation of ground. His cattle are principally of the pure Devonshire breed, and the most beautiful animals that I ever saw. He has a yearling bull which unites size and beauty in great perfection; his last spring calves are patterns of perfection, and from the appearance of all his stock he has no difficulty in getting even *all* of them through the year. His sheep are of the pure Merino, and a cross with the new Leicester; are well formed, large and healthy, and exhibited no signs of poverty nor want. He sent a few fat weathers to Buffalo last spring, which were the best mutton ever exhibited in that market. His hogs are a cross between the Berkshire and Leicester, which makes large, thrifty hogs, and evidently good feeders; and I am fully confident that any one who has a hard-pan farm would be well compensated for paying Mr. Beck a visit.

If you think the above will be of any value to your numerous readers, you are at liberty to publish it.

Yours most sincerely, J. D.

Batavia, Oct. 1, 1842.

☞ A communication on the same subject as this will be found on page 35.

Black Canker on Plum Trees.

Mr. Editor:—I have read the article over the signature of "P. B." in the first number of your new improved volume, and having long witnessed with pain the progress of the destroyer, "black canker," pursuing "to the death" the several varieties of the plum, and the red and black cherry, am heartily glad to see in any quarter, attempts to discover the *cause*, and arrest its progress.

I intend a brief notice of some of the supposed causes which he mentions, and then detail my own experience, with my belief as to the causing power of this wide-spread evil. I have no faith in the theory of those writers who attribute the disease to the "*atmosphere*," nor see any reason for imputing it to a "morbid circulation," as the vigorous vertical branches are attacked as well as the horizontal; such a "circulation" would have too little force to burst the firm bark of limbs of three or four years' growth.

The black canker is not formed by sap that "exudes," but is the result which follows the rapid even-like growth of a spongy bark, which is intermixed with fibrous wood, and is, I apprehend, the abode of animalculae that prey upon it, until the time of their change comes, after which it dries, and becomes the black unsightly canker. At its early stage it exhibits no sign of gum, and has the color and appearance of a vigorous growth of new bark, such as forms after a limb is taken off; and the *transparent* gum is seldom seen in it, and I believe never, unless a worm has found a home there. In most instances, where the transparent gum forms on the bark, by the cautious use of the knife you will find a white worm busily at work destroying the inner bark and new formed wood; these do much mischief. I have lost two fine trees from this cause alone.

I am skeptical, and so give little credit notwithstanding the strong authorities quoted, to the "*spike root*" cause, nature chooses for herself, and to argue that disease and death follows, from the fact that a tree chooses to push some one or more of its roots deep in the earth, is too vague and unsupported to convince. My garden has a warm, rich, deep soil, laying upon a dry, yellow gravely loam, twenty feet above water line. Near the centre part, which is annually manured and deep spaded, stands a fine damson plum, eight or nine years old. For two years past, this tree has suffered from this disease. There is no other plum near—has been no "neglect"—is no "ungenial sub-soil,"—no "suckers," and yet the disease is not exterminated, altho' the knife has been freely used. That it may have a "spike root," is perhaps probable, yet in such a soil, it would, I suppose, be less than 1-20th of its roots; and allowing the sap of the "spike" to be colder and less nutricious than that of the mass of roots, is it reasonable to suppose that the sap from the spike would overpower and *poison* the whole volume? If the disease is "contagious," as asserted, then there seems to be no need of the assumption that it springs from the *tap-root*.

I do not know with certainty, the cause of the black canker, but have little doubt that it proceeds from a fly or other insect, that punctures the bark and deposits its eggs. The upper surface of the horizontal branches show most of the canker, and I infer that the insect is led by instinct to choose the upper rather than the lower side of the limb for its place of deposite. I have sometimes found on examining these excrescences, a small worm one-fourth of an inch long within them, but are not able to decide whether his lodgment was primary or no; have repeatedly cut away the bark and wood down to the sound and healthy part, and found that it was followed by a vigorous and generally sound growth till healed. Would such a result have happened if the flow of sap was *morbid* or *poisoned*?

I have found an apparent benefit, and therefore recommend a free use of soap suds, a cautious use of brine, with occasional deposites of ashes and soot on the surface beneath the tree, and subsequently mixed with the soil. I believe the *larvæ* will be destroyed by a persevering use of these articles, and thus the *destroyer* will be exterminated.

There is in this vicinity, in the months of May and June, a *black fly*, that punctures and destroys a large portion of our plums when about half grown. This is felt as a serious evil, and unless the evil is stayed, we may as well cut down our trees, for very few sound plums are found. But let the effort be made—let every gardener carefully *pick up* the plums that fall prematurely, and *burn* them; every plum has a worm in it, and will find his way into the ground, and come out a fly in May, and continue the work of destruction unless this course is pursued. If this suggestion is attended to, and the brine, suds and ashes used as above, they will go far to eradicate these pests of the tree and its fruit.

J. HATHAWAY.

Rome, N. Y.

Farming in Iowa Territory.

Du Buque, Iowa, Dec. 22, 1842.

Mr. Editor:—I am glad to see that you have raised the price of your paper to $1. It has hitherto been too low—quite too low. I am certain, that you can procure more subscribers at $1, than you could otherwise do at 50 cts. We want fruit trees of all kinds, grapes, &c. &c.. in Iowa, very much. If some of your nursery men of New-York would bring on here, in the spring, valuable kinds of fruit scions, such as apple, pear, peach, plum, cherry, quince, nectarine, apricot, filbert, berries of all kinds, and grapevines, they would no doubt, reap a rich reward in a few years. I have a piece of ground one mile from Du Buque, peculiarly adapted to such business, which I will let on very moderate terms for a term of years, or I might be induced to take part in a nursery, if one could be fitted out with such scions, &c., as above named.

Please mention this, if convenient, to some of your gentlemen who have nurseries. As far as experiments have been tried here, fruit comes to perfection admirably. Some very large and fine apples were pulled last fall from some trees in this place, which grew in the garden of Mr. Heagle. He also raised a few peaches, which were indeed luscious.

You well recollect the first house erected in this place was in '33; in which year people were permitted by Government to emigrate. Iowa has improved since that time almost without a parallel. We have a rich soil, an abundance of water power, inexhaustible stores of mineral, (lead, copper and iron ore,) a salubrious climate, and the country is very healthy.

Du Buque is situated in the heart of those mines, and the country is filling up rapidly with an enterprising population. Our Territory is out of *debt*, and our legislature will, no doubt, have wisdom enough to avoid the *rock* upon which States and Territories have well nigh wrecked themselves. Our Territory will, ere long, rank high in the Union.

Yours, very respectfully, J. K.

For the New Genesee Farmer.

Large Produce.

Statement of Potatoes and Carrots raised in one season on one and a half acre of land, by Horace Clapp, Houseville, N. Y., viz:—

520 bushels of Potatoes, some of which weighed 2 lbs. 2 oz. each.

1340 bushels of Carrots, some of which measured 2 ft. 10 in. long.

1860 bushels.

Have a place for every thing, and when you have done using it, return it to its place. This will save much time in hunting after articles which are thrown carelessly aside.

AGENTS FOR THE ROCHESTER SEED STORE.

Fresh and Genuine Garden Seeds, raised principally by the proprietor, may be found at wholesale and retail at the following places. Also, orders received for Fruit Trees, and subscriptions for the NEW GENESEE FARMER, AND GARDENER'S JOURNAL.

Buffalo,	*N. Y.*	W. & G. Bryant,
Lockport,	"	S. H. Marks, & Co.
Middleport,	"	J. Craig & Co.
Albion,	"	Swan & Cornell,
Medina,	"	J. & J. Craig,
Brockport,	"	H. Lathrop,
Scottsville,	"	Andrus & Garbutt,
Le Roy,	"	Tompkins & Morgan,
Batavia,	"	J. V. D. Verplank,
York,	"	Murphy & Whitney,
Attica,	"	R. & N. Wells,
Perry,	"	L. B. Parsons & Son,
Mount Morris,	"	R. Sleeper,
Genesco,	"	G. W. Wyman,
Canandaigua,	"	J. M. Wheeler & Co.,
Geneva,	"	Hemiup & Cone,
Waterloo,	"	Thomas McClintock,
Seneca Falls,	"	Haskins & Keeler,
Auburn,	"	T. M. Hunt,
Syracuse,	"	T. B. Fitch & Co.
Utica,	"	J. E. Warner,
Oswego,	"	D. Canfield,
Cazenovia,	"	A. Ford,
Hamilton,	"	J. A. Mott,
Palmyra,	"	Hoyt & May.

Rochester, February 1, 1843. C. F. CROSMAN.

AGENTS FOR THE NEW GENESEE FARMER.

☞ In addition to the numerous Post Masters, and other friends of agriculture, who have generously aided the circulation of this paper, the following gentlemen will receive subscriptions in their different towns and cities:

New York,		Geo. C. Thorburn, (Seedsman,)
Albany,		Wm. Thorburn, "
Troy,		Henry Warren,
Lansingburgh,		John Bacon, "
Boston,	*Mass.,*	Little & Brown,
"	"	Ruggles, Nourse & Mason,
"	"	Hovey & Co. "
Worcester,	"	Clarendon Harris,
Lowell,	"	D. Bixby,
Salem,	"	John M. Ives, Francis Putman,

Traveling Agents.

Emmor Haines, - - - Rochester,
Charles W. Briggs, - - - - "
Daniel Wilcox, - - - - "

Others wanted who can give good references as to character. CROSMAN & SHEPARD.

Rochester, N. Y.

For the New Genesee Farmer.

The Agricultural Classes.

EXTRACTS FROM AN UNPUBLISHED ADDRESS AT AN AGRICULTURAL MEETING.

Agriculture is matter of universal concern; and it would be difficult for the most fertile imagination to frame an objection to our inquiries and pursuits in this case. It is the original appointment of the Creator, that man should be a tiller of the earth, and look to that for support. Here are the flowing breasts at which he is to be nourished and comforted. The Creator has made the earth gracious and bountiful to the wise children who render the tribute of filial duty; and her gifts are measured by our faithful endeavors to deserve her kindness. To frugality and sobriety, to skill and industry, she gives with an unstinted liberality; and it is among the most beneficent arrangements of the Divine Providence, that there is every thing to encourage labor. Labor of body is conducive and essential to vigor of mind. The muscles acquire strength by exercise. The mind is enlarged, strengthened, and elevated, by exertion. Man finds the perfection of his nature only in the unceasing and unbounded activity of all his powers.

Rural labor, and the inquisitive and intelligent cultivation of the earth, present no stimulus to any of the evil propensities of our nature; calm instead of inflaming passions, which, in their burning excesses, scatter misery and death; and combine a variety of occupations equally healthful to body and mind, presenting many of the most innocent and agreeable of sensible pleasures; and furnishing absorbing objects of study to the most philosophic inquirer. It is matter of just pride and gratification to the philanthropic mind, that agriculture as a pursuit and profession, is now rising to its proper place in the public estimation. Hitherto it has not so stood. The agricultural classes have been considered as beasts of burden; and have seemed but too content with their ignorance and degradation. In despotic countries they are still bought and sold with the soil, and transferred like so much of other live stock. Happy would it be, if in some other countries calling themselves free, the same inhuman and execrable system did not prevail. On the continent of Europe, boasting of its civilization, the condition of the peasantry is sufficiently degraded. The most servile employments devolve indiscriminately upon women and men. They perform the severest services. A traveler now living, whose credibility is beyond question, states that he has seen them harnessed to the plow like cattle. They are content to wear their wooden shoes, to labor for the lowest wages, and to submit to the meanest fare. We know, in such cases, who skims the cream, and who must be satisfied, if they get the skimmed milk, and enough of that.

The rights of labor have never been provided for as in this country. I go for the rights of labor, though it seems to be almost a forlorn hope. Property can take care of itself. Laws should render it secure. A man's honest earnings should be his own to dispose of for any innocent purpose, any purpose not incompatible with the public good, as he pleases. But the abolition of property, or the equalization of property in the present condition, I do not say of society, but of human nature, is a chimera which has not terror enough, if we will stop to reflect a moment, to frighten even our women and children. The acquisition and accumulation of property are dictated by an instinct of nature, wholesome in its original character, but leading to every species of fraud, oppression, and injustice, when unrestrained by conscience and honor, by social love, or the principles of religion. Property, therefore, will be sought, acquired, and maintained; and will be seeking ever to entrench and extend itself. Property is power. Those who have it, from the possessors of thousands to the possessors of units, feel concerned jointly to maintain it; for the same storm which would raze the palace to the ground, leaving not one stone upon another, would prostrate the lowliest cabin, and scatter its affrighted inmates. In a moment of frenzy, small parties of men might be hurried to deeds of violence, which seem to threaten a general destruction of the established institutions of society. But these cases are more rare in the political than even earthquakes in the natural world; and the law of self-preservation, felt as strongly in communities as among individuals, compel the vast majority in every community to unite in extinguishing such flames. While there is no danger, therefore, that property will not be maintained and protected, an enlightened and just community should take care of that class in society, whose only capital is their labor, and whose sole support and dependence are their labor. In despotic countries this class has always been oppressed, and incapable of rising from their degradation. Wealth and rank have always been arrayed against them, and have made it a constant study to tax their strength and endurance to the utmost limit, and to leave them as small a portion of that which has been produced by their own toils, as is barely sufficient, in many cases, to sustain life. This anomaly presents itself continually in the condition of labor in many parts of the world, that the actual producers come in for the smallest share of the product. This comes, in many cases, from the landed property of a country being held by a few hands; and the tillers of the earth being mere tenants at the will of the lord or master.

Things are totally different in a country like ours, where no entailment holds beyond the second generation, and where every man may become a freeholder in the soil. There may be here as in other countries, contrivances by legislation, or combination on the part of property, to press hardly upon labor; but while the tillers of the soil, as with us in general, are the holders of the soil, and while the sovereignty of the state resides, as with us, in the people themselves, there is a security and remedy against such evils, which do not exist in countries where the people have no alternative but to submit or rebel.

Emigration from New-England.

I may say, in the words of the Latin poet, "Happy would our farmers be if they only knew the blessings which they possess." May God give them this knowledge, and deepen the conviction of their privileges and blessings. They are pre-eminent. In my examination of the condition of other states and other countries, I see no good grounds for a New-England man to envy them. I cannot advise a New-England man to quit the home of his fathers, unless he has dishonored them by his ignorance or vice. I do not say that emigration may never be advantageous. There may be cases in which it would seem almost necessary. I cannot deny that in many cases it has been eminently successful: and it is always in the highest degree advantageous to the new states to transplant among them New-England men and New-England manners. But every such removal must be attended, among our rural population, with immense sacrifices and privations. In the education and training of their children, and their domestic comforts and social privileges, they will forego advantages which it will be all but impossible to repair; in respect to health, they are almost sure to suffer; and in the power of acquiring by industry and frugality an honest competence, nay, more than that, a reasonable independence, they can seldom better their condition by removal.

Let us do what we can, then, and all we can, to improve the condition and character of our rural population. We can labor at no higher object. How intimately their character and condition are connected with the preservation of public liberty and the prosperity of our political institutions, must be obvious to a reflecting mind. They constitute "the bone and sinew of the country," They are bound to it for weal and for wo. The merchant the mariner, the banker, the professional man, the mechanic, the tradesman, may leave or remain—may go when and where they will. The farmer is a fixture to the soil; his home and his property are there; and he can seldom leave them without great sacrifices of feeling and interest. In proportion as our rural population become enlightened and elevated, they will better understand and exercise their political rights; their stake in the public weal will be deeper, their attachment to liberty more strong and ardent.

Let us cultivate the mind;—this will assist in cultivating the soil with success. And may we not, from past experience, and from the constant progress and improvement which we daily witness, anticipate a still onward course of good in her future destiny; and look forward, at least for our children, if not for ourselves, to the time when her green hills shall be covered with more numerous flocks; her valleys wave with deeper and richer harvests of golden grain; the smoke of her peaceful cottages be winding over every hill; the busy hum of her schools resound like so many bee-hives, at every corner of her roads; the spires of her churches, pointing up to Heaven, glitter among her spreading groves; the temples of justice every where extending their equal scales; and the honest and inalienable rights of personal liberty, of property, of conscience, and religion, be every where acknowledged, accorded, and enjoyed, so as has never before fallen to the lot of man on earth?

We have much pleasure in laying, from the New England Farmer, the following account of the product of a small piece of land, before our readers. We know the place very well, and its industrious and excellent management. The place is in the vicinity of a market, though not a high one. We are inclined to think that the editor of the N. E. Farmer may have priced the products at too high a rate; still the result in any reasonable estimate, must be large. N. England abounds in such beautiful examples of good management on a small scale; and we are inclined to believe that there are scarcely a dozen farms in Illinois from which so large a cash product has been realized this year as from these five acres of Mr. Tappan.

Produce of Five Acres of Land.

Though there is much of romance in the accounts sometimes published of large crops, so that a sober-minded man hardly knows how much deduction to make from them in order to believe any part, yet it is also true that *facts* in agricultural, as well as in other matters, are often stranger than *fiction*. I send you the following statement of the produce of a plot of land measuring 5 acres and 1 1-6 rods, for the past year, owned and cultivated by Mr. Joshua Tappan, in Newberry, county of Essex. I was on the piece in October, and from what I saw of the crops harvested, independent of his own statements, I have no doubt of the correctness of the yield as given by him.

PRODUCE OF THE LOT.

1 ton of hay, worth		$12 00
66 bush. corn,		44 00
42 do oats,		12 00
6 1-2 tons beets,		33 00
272 bush. carrots,		45 00
12 do parsnips,		3 00
2 do ruta bagas,		25
4 do French turneps,		50
42 do Flat do		4 20
6 do cabbages,		50
274 do potatoes,		54 80
122 do onions,		40 00
3600 loose cabbage heads,		36 00
1761 good cabbages for market,		26 00
1 1-2 bushels sunflower seed,		1 50
1 pack carroway seed,		4 00
1-2 peck cabbage seed,		6 00
1-2 do turnep seed,		3 00
40 lbs. carrot seed,		17 00
20 lbs. onion seed,		8 00
2 bushels beet seed,		15 00
4 do peas,		6 00
2 do beans,		3 00
120 pounds sage,		12 00
10 do hops,		80
10 bushels tomatoes,		7 00
11 do apples,		4 50
4 dollars worth rhubarb,		4 00
2 do do asparagus,		2 00
		$405 65

Yours, &c. A. W. DODGE.

Hamilton, December 29, 1842.

☞The prices annexed to the above articles are given by the editor and not by Mr. Dodge. We have put the sums low, generally, and some of them probably are less than Mr. Tappan sold the marketable part of his crops for. But every one acquainted with farming, well knows that most crops have a refuse, unsaleable portion. This portion is included usually in the gross amount of crop, but cannot be sold for much. For this reason, we must put prices low, or we shall mislead many readers.

The stover or corn fodder is not included in the above; it probably was worth from 12 to 15 dollars.

As the quality of the articles was unknown to us, we probably have hit wide from the true mark, in many instances. Four hundred dollars worth of products from 5 acres of land, when prices are low as at present, is a large amount.—*Ed. N. E. Far.*

Dr. Cooper, of Kelloggsville, Cayuga county, slaughtered three hogs on the 27th Jan., between 18 and 20 months old, whose united weight was 1692 pounds. They weighed as follows: 704, 587 and 410, averaging 564 pounds each!

Royal Agricultural Society of England.

IMPROVEMENT OF FRESH AND SALT BUTTER.

Mr. William Were, residing at 44 Botolph Lane in the city, and who for upwards of thirty years has been engaged extensively in the butter trade of London, communicated to the Council the following suggestions for improving the qualities of fresh and salt butter:

—

44 Botolph Lane, London, April 20, 1842.

Solidity and firmness, I think, is of more consequence than is generally allowed. The nearer butter can be made of the consistency of wax, the longer it will keep its flavor; and as it is not so easily acted upon by the atmospheric air, it will retain less salt or brine, being divested more effectually of the buttermilk; consequently will be less disposed to acidity.

To accomplish this object, I recommend salting the cream, by putting rather more fine table salt to it than is used when applied after churning, because a part will be left with the buttermilk. Or, use strong clean brine, the produce of the salt generally used, and mix with the cream or butter—the hand to be used in the making, as little as possible. The earlier the butter is made, and the cooler the dairy, the better. The latter should be washed out with salt and water, the first and last thing every day. The hand relaxes the texture of the butter. It might by a little practice be avoided altogether, by using wooden pats, the same as are used by the London cheesemongers, for putting into casks or making into shape for sale, which will effectually press out the whey, by beating. These pats must be always (except when in the hand for use) kept in a tub of fresh cold water; which will prevent the adhering of the butter, and keep them cool.

The quantity of salt or brine required, will in some degree depend on the season of the year, the distance to be sent, and time to be kept. Brine is preferable to salt, as the butter is smoother and better flavored. If salt be used, it may be in the proportion of half an ounce of fine dry table salt, mixed with two drachms of fine saltpetre, and two drachms of fine yellow dry Jamaica sugar, to every pound of butter. If the butter be made up in lumps for the market, I would recommend that every lump be wrapped round with a piece of calico soaked in brine made from fine dry salt, that will carry an egg. If the brine be weak and watery, it may be injurious. If the butter be put into a firkin or half-firkin, the cask should be made of white oak, ash, sycamore, or beech, (the whiter the wood and hoops, the better it pleases the eye,) well seasoned by scalding out several times with hot brine made from pure and clean salt. It should be well bound and made water-tight, with head and bottom grooved. Three pounds should be allowed for soakage.

If very choice butter, I would recommend a sait cloth around the butter, also on the top and at the bottom. The cloth can be kept in its place by a hoop, which can be removed as the cask fills. In either case, the cloths can be returned or sold to the buyer, as many of the cheesemongers use cloth instead of paper, in sending out the butter to the consumer.

Much observation, attention, and arrangement is required to see and judge as to what improvement can be effected in the make of butter—comparative statements from different daries at differeni times—the temperament of the milk and cream in the different stages—the situation and state of the dairy—the quantity and quality of cream the milk will yield in different localities, under different management—the effects of the use of various sorts of salt, brine, sugar, honey, or saltpetre, mixed with the milk, the cream, or the butter—the effect of mixing different milks together—the effect of heat and acid applied in churning—the best sort of coloring—if any, and what description of food has such effect—the effect of dry, wet, or shady pasture, also of regular exercise for the cows—if any, and what effect, as to production of cream in proportion to the milk given by the cows, if feeding on corn or grain, or by adding meal in the water for drink. WILLIAM WERE.

—

The wooden pats recommended by Mr. Were to be used instead of the hands, in making butter, consist of a thin spatula a foot long and three inches broad, and a solid spoon-shaped implement a few inches longer, with longitudinal grooves on its flat inner surface, for dabbing, pressing, and crimping the butter; and suggested that these pats, when out of use, should always be kept in cold spring-water to prevent the butter from adhering to them.

The Council returned to Mr. Were their best thanks for this communication.

Mr. Burke explained to the Council the importance of a discriminating choice in the selection of the proper kind of salt adapted to each kind of butter and chese to be made, attributing the superiority of the Dutch in their dairy management, in a great measure to their care in this particuiar. Mr. Burke also stated that, in many parts of Holland, the brine was added, not to the butter itself, but to the cream from which it was to be obtained; and that he believed honey to be preferable to sugar, as an addition for improving its quality.

Duty to the Helpless.

A BEAUTIFUL EXTRACT.

You accuse machines, said De Lamartine, the French poet and statesman, in an eloquent speech delivered before the Academy at Macow,—they are the artificial hands of the laborer. All natural things are machines for man as soon as he can think. No animal invents a machine: in this is its weakness. Man does; and in this is his force. They attest his perfectability. Blaspheme not creation by accusing industry. Corrupted and crafty civilization has not made man industrious, but God. Industries are the degrees of rising civilization. Will you dare to curse, to check, and to destroy them? No, in place of stopping our workmen, and destroying our machines, let us accept and triumph over the difficulties of our epoch. The great successes of civilization are born convulsive efforts. The world becomes industrial. Give industry a soul which shall nullify its great vice—*the hardness of heart begotten in nations who make wealth their idol.* You have pronounced, in conclusion, a word for the language of religion destined also to become a political term, "charity." Public wealth has three inflexible absolute laws. Labor, liberty for labor, and competition. Every man should labor; it is a law of nature, a law of spirit as well as matter. Every man should labor freely, without any other restraint upon his power of working and producing than competition with those who labor and produce as he does. This is the law; if it be violated we become arbitrary and oppressive; obstacles are raised up against one man for another's profit, or a maximum of labor and production is established, which not only impoverishes and ruins the state, but which throws a chain on the most incontestible of the rights of man—the right of living by the sweat of his brow. But we must not hide from ourselves that competition alone is insufficient—competition is egotism abandoned to itself—it acts with the blind brute force of fatality—it crushes and tramples on all around it. "Let the world fall to ruin provided that I be enriched." This is its motto—can this be the device of a well-organized, moral, and, above all, Christian society? No; when competition has annihilated industry, and wrenched the last penny, the last crust of bread, from the hands of the laborer without employment, society cannot turn round upon him and say, "Die of hunger." The last word—the last reason which a well-organized society could utter, could never be death—the last words of society are life, that is to say, labor and bread. Yes, the science of political economy is confined—law is austere and severe, and competition is without pity; but, then, is there nothing beyond science, competitions, systems, and written laws? Beyond this lies a whole world—a moral world; there is God, with his laws not written, but interpreted and expounded by philosophers and religious men, in which we find correction and compensation for our imperfect laws, as all must be imperfect that is written by the hand of man. Yes, therein do we find inspirations immeasurably superior to those of bartering avarice, or of a purely human policy. Without such inspirations there is no society that will not sink under the weight of its own vices, egotism. inequalities, and miseries. The equilibrium which is ever and anon thrust aside by cupidity, may be restored by care and courage. There is a ceaseless struggle between charity and cupidity. And for what do we ask? That political society should not stand by passively gazing on the struggle that is going on between industry, wealth, and labor; that it should interpose, not by pushing itself arbitrarily between the manufacturer and his workmen—between the consumer and the producer—but that it should interpose, with all the power which it possesses, to afford assistance wherever there exists a necessity for its helping hand; to shower down a tempory supply of funds wherever there be a congregation of the working classes out of employment; in a word, let it be as a visible, enlightened, active Providence, shedding its healing balm upon the sufferings of the population; let it strive to imitate that invisible Providence which is sometimes hidden from the sight of the unfortunate, in order to endow society with the glory and honor of supplying its place for a moment. Let us separate with these hopes; and in accepting the democratic conditions of society, let us each, in our own sphere, labor for their improvement, You members of this academy, which shows the human mind in all its brilliant and solid phases—you who light up the road of thought—reflect, meditate, and create science. We men of application and administration, we will make laws and regulations—and you, pious men, ministers of alms and human virtues, lend us, for the consummation of our imperfect laws, those two powers which you alone possess, and without which no society can hold its ground—charity on high, and resignation here below.

These sentiments of the illustrious French statesman unfold views of profound truthfulness peculiarly applicable to the state of society in England at the present. Those in station, authority, and power, should rise above the miserable level of routine official duties, and take into their most serious considerations the state-of-the-country question, while yet there remains the opportunity of doing so with any prospect of ultimate benefit to the nation at large.

LOWELL MANUFACTURES.

Most of the people have had but a vague and indefinite idea of the immense amount of business which is done in this city, by the different manufacturing corporations. There are in this city eleven distinct corporations, viz.: The Locks and Canals, Merrimack, the Hamilton, the Appleton, the Lowell, the Middlesex, the Suffolk, the Tremont, the Lawrence, the Boott, and the Massachusetts. The total amount of capital stock, exclusive of the printworks, is $10,500,000 32. Number of pounds of cotton consumed in a year, 28,764,400. Assuming half to be upland and half to be N. Orleans and Alabama, the consumption in bales, averaging 361 lbs. each, is 65,828. The capital stock of the Merrimack is $1,000,000; the Lawrence, $1,500,000; the Boott and Massachusetts, $1,200,000 each; the Hamilton is $1,000,000; the others are $600,000 each. There are 192,276 spindles in operation, and 6,018 looms, which employ 7,430 females and 1,787 males. This is exclusive of the Locks and Canals Company, which employs constantly 500 men. The number of yards of cloth made every week, is 1,435,450. The number per annum, is 73,853,400. One pound of cotton will make, on an average, 3 1-5 yards of cloth. The companies consume 11,410 tons per year, of anthracite coal, 3,589 cords of wood, 78,689 gallons of oil, 600,000 bushels of charcoal, and 800,000 lbs. of starch.

The Locks and Canals Machine Shop, included among the 32 mills, can furnish machinery complete for a mill of 5,000 spindles in four months; and lumber and materials are always at command, with which to build or rebuild a mill in that time, if required. When building mills, the Locks and Canals employ, directly and indirectly, from ten to twelve hundred hands.

To the above-named principal establishments may be added, the Lowell Water Proofing, connected with the Middlesex Manufacturing Company; the extensive Powder Mills of O. M. Whipple, Esq.; the Lowell Bleachery, with a capital of $50,000; Flannel Mill; Blanket Mill: Batting Mill; Paper Mill; Card and Whip Factory; Planing Machine; Reed Machine; Foundry; Flour, Grist, and Saw Mills; together employing about 500 hands, and a capital of $500,000.—*Lowell Journal.*

SHEEP.—The Cincinnati Gazette speaks of three Bakewell sheep passing that office in charge of S. Beresford, of enormous size and fine fleece. The weight, alive, was 207 lbs., 194 lbs., and 191 lbs.; they were two years old last spring. These sheep were raised by Mr. Whitehead, of Franklin county, Indiana, and were decidedly among the finest ever exhibited in that part of the country.

Fruit Trees, Shrubs, and Flowering Plants.

Messrs. Ellwanger & Barry have just issued a very copious Catalogue of the Fruit and Ornamental Trees, Bulbous Roots, and Flowering Shrubs, cultivated and for sale at their Nursery and Garden, near Mount Hope, in Rochester. This Catalogue is highly creditable to the skill and enterprise of the industrious cultivators, and offers the most favorable opportunity to the Farmers and others to enrich and embellish their places and grounds.

Fruit is, and will long remain, one of the most valuable products of a farm. We have eaten apples this very winter in Philadelphia, which were grown in Western New York, and sold there to the mutual advantage of grower, seller and buyer. Flowers and flowering shrubs ought to be cultivated as matters of taste; as a source of innocent and delightful recreation; for their moral effects; and lastly, as very much increasing the value of a place, and making it much more attractive and saleable, should there exist at any time the necessity of sale.

From the Plymouth Herald.

Friendly Advice to the Small Farmer.

PRACTICAL DIRECTIONS FOR THE PLACE AND MANAGEMENT OF THE DUNG HEAP.

Sir,—Farmers have generally found out the advantage of having a dung-pit instead of a dung-heap; but still the rich drainage of the dung is much of it allowed to run away. The urine from the stables, &c., does not half of it run into the dung, though it is the best part, the essence of the whole; and the privy manure, which is better still, is mostly neglected altogether.

All drainings from the stables, cow-houses, and styes, should run into the pit, and the overflowings should be caught in another pit, to throw back in dry weather.

The following is a cheap and effectual method of doing all this:

When convenient, the pit should be on the North side of a wall or of some trees, to shade off the sun; or under shed, to keep off both wind and rain. But these advantages cannot always be had, without too much cost.

Having selected the best place for your pit, first lay in way soil, peat, or any soil as different as possible from that of your farm, and give it a hollow surface, like a great tea-saucer. Upon this lay potato stalks, and any other vegetable matters, easy to ferment, and hereupon a layer of dun g Next a layer of vegetable matter, as peat, turf, bark, rotten weeds, ferns, leaves, or any kind of dead vegetable, to increase your quantity; and so every week, cover your dung from the stables, styes. &c., with three or four times as much dead vegetable matter; thus making up your heap in alternate layers. The urine should all run into the pit from stables and all, by narrow drains, where it will not be much exposed to evaporation; and another such drain should lead from it to a lower pit, to catch the overflowings when there are any, and keep them to throw back upon the dung in dry times. This lower pit should be deeper and smaller than the other, and must never be allowed to overflow, as that would be waste. It may contain cabbage stumps and other things difficult to work, which may be thrown back upon the heap as they rot.

The lower pit may be used as a store of liquid manure, for watering young corn in May or June; which gives it a start, and much strengthens its growth. In leaky ground, the bottom of the pots should be *staunched* with clay, and stones or gravel stamped in to harden it.

The privy should discharge into the large pit, if possible, or else into the small one; and coal ashes (but not wood ashes) are good to throw where this comes out. Saw-dust or turf-dust from the stacks, do very well. House-washings, as soap-suds. &c., should also be thrown on the heap; but the wash of the country and heavy floods of rain should not be allowed to enter it, but be led into the meadows by other channels.

In wet seasons, the top should be slanted to turn off the rain.

Each layer of dung being covered with a layer of peat or other dead vegetable matter, the whole heap, when finished, should be crusted over with way-soil or other earth, to retain the vapors.

The fermentation will be slower or quicker, as it is more or less covered and compressed.

Wherever your heaps are made, whether in the yard or the field, give them a bed of some sort to absorb the drainage, and crust them over with soil, and mix all up with the dung before spreading. The drainage carries down the strength of the heap; sometimes enough to kill the seed in the place where the heap stood; whilst it would have been of the greatest benefit if spread out with the dung.

An English Thunder Storm.—A curious incident occurred in a crowd. The finger of an individual suddenly became light, and was conducted with electrical velocity into another person's pocket; when, being attracted by the metal, it struck upon the whole of it, and then glided off: so that the bolt which usually follows, was quite in another direction.—*Punch.*

Meteorological Observations,

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY L. WITHERELL, FROM JANUARY 25, TO FEBRUARY 25, 1843.

Date.	Thermometer. Sunrise.	1 o'clock, P. M.	1 h. af. sunset.	Mean.	Winds. A. M.	Winds. P. M.	Weather. A. M.	Weather. P. M.	Rain Gage.
26	11	22	10	16.5	N	N	snow,	snow,	
27	24	38	32	31.66	S E	E	cloudy,	cloudy,	
28	26	28	28	25.66	N W	N	snow,	snow,	
29	16	31	23	22.33	N W	N W	fair,	fair,	
30	10	33	31	29.	S	S S E	fair,	fair,	
31	36	38	33	32.66	S	S	rain,	rain & s	1.68
1	18	21	16	16.33	W	W	cloudy,	snow,	
2	6	16	16	14.16	W	N W	snow,	fair,	
3	18	30	25	25.33	S W	S W	snow,	snow,	
4	24	35	21	26.83	W	W	snow,	snow,	
5	25	27	25	24.16	N E	E	snow,	snow,	
6	16	16	9	12.16	N W	N W	snow,	snow,	
7	7	15	16	13.5	N W	N W	snow,	snow,	
8	12	22	12	15.33	N W	W	snow,	snow,	
9	12	23	17	16.33	N W	N W	snow,	snow,	
10	6	24	28	22.66	S E	S	cloudy,	snow,	
11	26	18	8	18.16	S W	W	cloudy,	fair,	
12	11	17	14	14.33	W	N W	fair,	fair,	
13	13	23	18	17.83	W	N E	snow,	snow,	
14	12	16	13	13.5	N E	N E	snow,	snow,	1.48
15	11	20	12	13.	N W	N W	fair,	fair,	
16	3	16	7	7.66	W	W	fair,	fair,	
17	-3	14	9	3.83	W	W	fair,	fair,	
18	-6	18	11	10.5	W	S W	fair,	snow,	
19	11	29	23	22.33	S E	N E	snow,	snow,	
20	19	30	18	21.16	W	W	snow,	fair,	
21	12	32	25	26.83	W	W	snow,	snow,	
22	23	22	18	18.33	N W	N W	snow,	cloudy,	
23	7	22	15	13.5	N W	S W	cloudy,	fair,	
24	0	26	18	17.16	W	W	fair,	fair,	
25	15	36	31	29.33	W	W	fair,	cloudy,	

Range of thermometer for the month, 44 degrees. Greatest range of the winter 66 degrees.

The fall of rain and melted snow during the month of January, 2.79 inches. Do. 1842, 1.13 inches. Do. 1841, 2.13 in. Do. 1840, 1.16 inches.

Mean temperature of Jan. 1843, 31.63 degrees.
Do. " 1842, 29.64 "
Do. " 1841, 27.90 "
Do. " 1840, 19.48 "

REMARKS ON THE WEATHER, FROM JANUARY 26TH TO FEBRUARY 26TH.

Jan. 26—Snow squalls.
" 27—Hail last night.
" 28—Seven inches of snow fell last night.
" 29—Cloudless day.
" 30—White frost—very fine day.
" 31—Rain and snow.
Feb. 1—Snow squall this evening.
" 5—Tedious snow storm.
" 6—High wind; the storm continues very tedious; snow very much drifted.
" 7—Sun shone this morning.
" 11—Wind began to blow last night about sunset, and continued through the night, and until noon to-day.
" 14—A real "Northeaster," to-day.
" 17—Thermometer three below Zero.
" 18—Thermometer six below Zero; the coldest weather we have had here for several years.
" 24—Thermometer at Zero, this morning.

Note.—The month of February has been very cold. We have had, also, a large quantity of snow during the month; and the snow still remains.

CONTENTS OF THIS NUMBER.

To Correspondents and others—Agricultural Gleanings—To the Agricultural Public, - - - - - - - - - 33
Letters from Ohio, No. 3.—Cultivation of Madder, - - - 34
Culture of Weld—Canker on Plum Trees—Improved Dynamometer, or Plow Guage, - - - - - - - - - 35
Sheep Husbandry, - - - - - - - - - 36-38
" " Relative Value of different kinds of Food for Sheep—Improvement—A Valuable Cow, - - - - - 39
Poultry—Eggs—Figure of Poultry House—Poultry better than Pork or Beef, - - - - - - - - - - 40
Improved Silk Reel—Experiments in Raising Silk, - - - 41
Mr. Allen's Experiments—Silk Growing, - - - - - 42
Mr. Stebbins' Remarks on Silk Worms, &c.—Improvement in Wheat—Mr. Harmon's White Flint—To Wash Woolens, - 43
Ontario Agricultural Society—Livingston County Agricultural Society—Premium Steam Generator—Description of the Shakers' Stone Barn—Feeding Apples to Swine—Actual Improvement, - - - - - - - - - - - - 44
Black Canker on Plum Trees—Farming in Iowa—Large Produce—Agents for Rochester Seed Store and Farmer, - - 45
Agricultural Classes—Emigration from New-England—Produce of Five Acres of Land, - - - - - - - - 46
Improvement in Making Butter—Duty to the Helpless—Lowell Manufactures—Bakewell Sheep, - - - - - - - 47
Fruit Trees, Shrubs, and Flowering Plants—Friendly Advice to the Small Farmer—Meteorological Observations—Markets—Advertisements, &c., - - - - - - - - - 48

☞ The excellent Agricultural Address of James M. Garnett is in type, but the great length of the article on Sheep Husbandry and the many valuable favors from correspondents, prevents its insertion until the next number.

PITTS' GRAIN SEPARATOR.

THE subscriber hereby gives notice that he has left Albany and located in the city of Rochester, N. Y., where he will furnish his Machine, (Pitts' Separator,) to purchasers, in its most improved form. It will be furnished in combination with the Thrasher, or, if desired, in such form that it can be attached to the common thrashing machine. JOHN A. PITTS.

Rochester, January, '43.

ROCHESTER PRODUCE MARKET.

Wheat,	$0 75 a 78	Hay, ton,	$6 00 a 00	Eggs, doz.	12½ a00
Corn,	31 33	Wood, cord,	2 00	Tallow, lb.	7
Barley,	00 00	Salt, bbl.,	1 00	Beeswax,	25
Oats,	16	Hams, lb.,	4 4½	Wool,	20 30
Flour, (ret.)	3 50 3 75	Shoulders,	3	Sheep Skins,	25 50
Beans,	75 1 00	Pork, cwt.	3 00 3 50	Green H'ds, lb.	3
Peas,	38 50	Beef,	2 00 3 00	Dry Hides,	6
Potatoes,	13 18	Lard, lb.,	6	Calf skins, gr'n,	6
Clovers'd,	3 50	Butter,	8 10	do. dry,	12½
Timothy,	1 00	Cheese, cwt.	4 00 5 00		

March 4,

PURE CLOVER AND TIMOTHY SEED

WANTED.—A few hundred bushels of the first quality at the Rochester Seed Store. C. F. CROSMAN.

MONROE GARDEN AND NURSERIES.

THE Subscriber having become Proprietor of the above well known establishment, (lately occupied by Asa Rowe, Esq.,) begs to announce to the public, that there is now in condition for sale, a very extensive variety of the choicest and best descriptions of Fruit Trees; also, Ornamental Trees, Green-House Plants, &c. Great pains were taken by the late occupant to introduce the most celebrated kinds of Apple, Peach, and Cherry Trees; and those who be disposed to favor the subscriber with their orders, can rely upon having Fruit according to representation.

☞ Orders punctually and carefully attended to. A deduction suitable to the times, will be made from former prices.

N. B.—Catalogues will be ready on the 8th inst., and may be had gratis, by applying at the Seed Store of C. F. Crosman, or to the subscriber. Greece, March 1, 1843. 3m FRANCIS TRYON.

FRUIT & ORNAMENTAL TREES, AND SHRUBS, AT THE ROCHESTER, N. Y., NURSERY.

THE Subscriber offers for sale a choice collection of Fruit and Ornamental Trees, and Hardy Shrubs, which have been cultivated with great care, and are of suitable size for transplanting this spring. Persons wishing a succession of Fruit, and not being familiar with the necessary varieties, by leaving the selection to the subscriber may depend upon receiving the most desirable assortment. In every such selection, QUALITY, and not the size of the trees, will be the rule adopted.

☞ For particulars see Catalogue, which may be had by application. Orders from a distance will be carefully packed and shipped according to directions Nursery, East North.-st., 3 miles North of Rochester. Office, 36 Front-street.

March, 1843. 3m SAMUEL MOULSON.

FRUIT AND ORNAMENTAL TREES, &c.

MOUNT HOPE GARDEN AND NURSERIES, Rochester, N. Y.—The Proprietors of this Establishment offer for sale a general assortment of Nursery articles, comprising Fruit and Ornamental Trees, Flowering Shrubs, Herbaceous Plants, Tulips, Hyacinths, and other Bulbous Flower Roots, Double Dahlias, &c. &c.

They have also on hand a large and fine collection of Green and Hot House Plants, including Geraniums, Chinese Monthly Roses, Camellia, Japonica, Chinese Azaleas, Cape Jasmines, Cactuses, &c.

Orders for any of the above articles, whether large or small, will be promptly and faithfully executed, and charges in all cases will be very moderate. Persons ordering from a distance may rely on having their articles securely packed, marked, and shipped, as their orders may designate.

To such persons as are about forming new establishments, or who may wish to dispose of Trees, Shrubs, Plants, &c., in their neighborhood, our terms will be very liberal.

Gardens and Pleasure Grounds will be laid out, in any part of the country, and skilful gardeners furnished on reasonable notice, and information on any subject connected with the business will be cheerfully and promptly imparted.

It is expected that persons unacquainted with the Proprietors, will either accompany their orders with a remittance, or name a guarantee in the city of Rochester or vicinity.

March 1, 1843. ELLWANGER & BARRY.

N. B.—Our Fruit Trees comprise the most desirable early and late varieties, and the utmost care has been taken in propagating from such trees only as were in a bearing state, and whose qualities have been sufficiently tested. Priced Catalogues will be forwarded, *gratis*, to all applicants—or may be had at the Seed Store, and at the Bookstores of D. Hoyt and Wm. Alling, Rochester. 2m

J. HATCH'S SOWING MACHINES,

WILL now be manufactured in the shop of JOSEPH HALL, in this city, who is well known as a manufacturer of Thrashing Machines, and who, having the best of workmen and facilities for doing all such kinds of business, the work will therefore be done in a manner to warrant style, strength durability, and utility. Machines can be had at any time on short notice. The price will be Forty Dollars.

Many persons at a distance write me on the subject of my Machines, and give references to some friend of theirs in this city; upon the strength of whose integrity they expect me to send them a Machine, on trial, before I receive the pay. To such I would say—if their friend is worthy of my trust, they may use their own confidence in that friend, and get him to examine the Machine and inform them of its merits; and when the money shall be received, a Machine will be sent according to order. It is often inquired, by distant correspondents, whether the Machines cannot be sent in an unfinished state. To them I would say, it would be ruinous to my interest, and the promotion of the improvement I have so ardently toiled to accomplish.

☞ Rights of States, or Counties, are for sale on reasonable terms. All letters, post paid, will be answered without delay.

Rochester, March, 1843. J. HATCH.

GEO. W. MERCHANT'S CELEBRATED GARGLING OIL,

FOR removing the following diseases from horses, &c.—*Fresh Wounds, Spavins, Sweeney, Galls of all kinds, Fistula, Sitfast, Sprains, Bruises, Strains, Lameness, Cracked Heels, Sand Cracks, Ring Bone, Foundered Feet, Poll Evil, Scratches or Grease, Windgalls, Horn Distemper, &c.*

This Oil is prepared from the choicest selected materials, only at the Labratory of the Proprietor, Lockport, N. Y. For testimonials, synopsis of diseases, and mode of treatment, see pamphlet, which accompanies each bottle.

For sale at the Rochester Seed Store, and by most of the respectable Druggists in the States.

Rochester, January 11, 1843.

FROM THE POWER PRESS OF ERASTUS SHEPARD,
No. 22, State Street, Rochester, sign of the Daily Evening Post.
☞ All kinds of Book and Job Printing done promptly.